BLUE ROCK
ENVIRONMENTAL, INC.

FILE COPY

Mr. Mark Verhey
Humboldt County Health Department
Division of Environmental Health
100 H Street, Suite 100
Eureka, California 95501

January 4, 2006

Re: Fourth Quarter 2005 Groundwater Monitoring Report
Former Cash Oil Fortuna
409 South Fortuna Boulevard, Fortuna, CA
HCDEH LOP No. 12652
Blue Rock Project No. NC-004

Dear Mr. Verhey,

This report presents the results of the fourth quarter 2005 groundwater monitoring activities at 409 South Fortuna Boulevard, Fortuna, Humboldt County, California (site) (Figure 1), and was prepared for Clyde Harvey by Blue Rock Environmental, Inc. (Blue Rock).

Background

Site Description

The former Cash Oil Service Station is located on the corner of South Fortuna Boulevard and Newburg Road in Fortuna, California. The site is located in an area of low topographic relief and is considered part of the Eel River flood plain (Figure 1). The site formerly contained one single-story building with four pump islands that were used to dispense unleaded gasoline from four fiberglass lined, single walled steel 10,000-gallon underground storage tanks (UST), three in Complex #1 and one in Complex #2 (Figure 2).

Site History

On May 8, 1997, as part of a UST system upgrade, Clearwater Group (Clearwater) observed Tank Liners Inc. drill three soil borings B-1, B-2, and B-3 for collection of soil and groundwater samples as required by the HCDEH (Figure 2). Laboratory analytical results from the soil and groundwater samples indicated that an unauthorized release of petroleum had occurred from the UST system.

In May 2000, Cash Oil Company sold the property and upgraded UST system to Golden Gate Petroleum of Martinez, California.

535 THIRD ST., SUITE 100 * EUREKA, CA 95501 * OFFICE (707) 441-1934 * FAX (707) 441-1949

In August 2004, Beacom Construction (Beacom) of Fortuna, California, on behalf of Golden Gate Petroleum, removed the (4) 10,000-gallon USTs and associated fuel dispensers from the site. The site is being redeveloped as a commercial property.

Site Investigation History

Subsurface investigation activities have been ongoing at the site since 2000. A total of approximately 15 soil borings (B-1 through B-12, and HP-9 through HP-11) have been drilled and fourteen monitoring wells (MW-1 through MW-9A/B, MW-10A/B, and MW-11A/B) have been installed at the site (Figure 2). Groundwater monitoring has been ongoing since the wells were installed. Monitoring well construction data are summarized on Table 1 and groundwater sample data are summarized on Table 2.

Summary of Contaminant Type

The predominant contaminant types that have been detected in the subsurface include total petroleum hydrocarbons as gasoline (TPHg), benzene, toluene, ethylbenzene, and xylenes (BTEX), and the fuel oxygenates MTBE, TBA, ETBE, and TAME.

Summary of Hydrogeology

The first couple feet below grade consists of baserock fill. The site is underlain by sediments characterized as elastic clayey silt (MH) from a depth of ~2 to ~17 feet bgs, which is underlain by gravel (GW) with a lesser amount of sand (SW) to a depth of ~20 feet bgs (the maximum depth explored).

There appears to be a perched water bearing zone located within the elastic clayey silt (MH) at a general depth interval of 4 to 10 feet bgs, referred to here as the A-Zone. This zone consists of fine-grained soil types, i.e. silt/clay, and does not appear to be very permeable. Shortly after installation, water stabilized in one of the A-Zone wells (MW-10A) at a depth of approximately 4.5 feet bgs; however, water did not enter the other A-Zone wells. This may have been the result of that fact these wells were installed near the end of the dry season, and it is likely that water will enter these wells by the end of the subsequent rainy season.

The gravel/sand (GW/SW) unit from a depth of ~17 to 20 feet bgs (and deeper) is referred to here as the B-Zone. B-Zone wells screened from 15 to 20 feet bgs have shown groundwater flow generally toward west and west-northwest. Shortly after installation, water in these wells generally stabilized at a depth of 14.5 feet bgs. Potentiometric data from almost all of the other wells previously installed at the site (screened from 5 to 20 feet bgs) fall within the pattern of data from the B-Zone, except MW-7, which appears to be more consistent with the A-Zone data.

Summary of Remedial Efforts

In August 2004, Blue Rock supervised Van Meter Construction of Redway, California excavate 2,034 tons of petroleum contaminated soil from the vicinity of the former UST fuel system. The lateral extent of the excavation is shown on Figure 2, and the depth of the excavation was irregular, ranging from approximately 6 to 18 feet bgs. The remedial soil excavation removed an estimated 2,109 pounds (346 gallons) of hydrocarbons from the site. Blue Rock mixed approximately 750 pounds of ORC into the excavation backfill. Monitoring well MW-3 was destroyed during remedial excavation activities. Remedial activities are presented in Blue Rock's *Remedial Report of Findings*, dated September 1, 2004.

Field and Laboratory Activities

Groundwater Monitoring Activities

On December 16, 2005, all 13 projects wells (MW-1, MW-2, MW-4 through MW-8, and MW-9A&B through MW-11A&B) and MW-16 (Fortuna Beacon - Humboldt Petroleum) were gauged for depth to water, and 11 eleven wells were scheduled to be sampled. MW-11A could not be sampled because it was dry.

Prior to sampling, an electronic water level indicator was used to gauge depth to water in each well, accurate to within ±0.01-foot. All wells were checked for the presence of light non-aqueous phase liquid (LNAPL) petroleum prior to purging. No measurable thicknesses of LNAPL were observed on groundwater in any of the wells.

In preparation for sampling, the wells were purged of groundwater until sampling parameters (temperature, pH, and conductivity) stabilized. Dissolved oxygen levels were also measured.

Following recovery of water levels to approximately 80% of their static levels, groundwater samples were collected from the wells using disposable polyethylene bailers and transferred to laboratory supplied containers. Sample containers were labeled, documented on a chain-of-custody form, and placed on ice in a cooler for transport to the project laboratory.

Purging instruments were cleaned between use by an Alconox® wash followed by double rinse in clean tap water to prevent cross-contamination. Purge and rinseate water was stored on-site in labeled 55-gallon drums pending future removal and disposal.

Groundwater monitoring and well purging information is presented on Gauge Data/Purge Calculations and Purge Data sheets (attached).

Groundwater Sample Analyses

Groundwater samples were analyzed by Kiff Analytical (Kiff), a DHS-certified laboratory, located in Davis, California, for the following analytes:

- TPHg, BTEX, and MTBE by EPA Method 5030/8260B.

Groundwater Monitoring Results

Groundwater Flow Direction and Gradient

Groundwater flow direction in the A-Zone could not be determined this period because only two of three wells in this zone contained water. It is notable that water has now entered two of the three A-Zone wells, at the onset of the rainy season. It is anticipated that water will enter the third A-Zone well by the end of the rainy season.

Groundwater flow direction in the B-Zone was calculated to be toward the northwest at a gradient of 0.041 ft/ft (Figure 3). Only wells MW-9B, MW-10B, and MW-11B were used to calculate this flow direction; however, it should be noted that almost all of the previously installed wells have groundwater elevations that appear to fall within the pattern of data from B-Zone wells, except MW-7. Hydraulic data from MW-7 appear to be more consistent with A-Zone wells.

Groundwater elevations in the A-Zone were ~8 feet higher than in the B-Zone this quarter. This indicates that there is a downward gradient between the A- and B-Zones. This was the anticipated result, as water in the A-Zone is hypothesized to originate mostly form surface infiltration which accumulates in the A-Zone as it migrates downward.

Groundwater Contaminant Analytical Results

LNAPL:	None
TPHg concentration:	<50 µg/L (seven wells) to 5,500 µg/L (MW-1)
Benzene concentration:	<0.50 µg/L (seven wells) to 4.7 µg/L (MW-1)
MTBE Concentration:	<0.50 µg/L (three wells) to 240 µg/L (MW-1)
Dissolved Oxygen:	0.58 mg/L (MW-7) to 6.45 (MW-6)

Groundwater sample analytical results are shown graphically on Figures 4a and 4b. Cumulative groundwater sample analytical results are summarized in Table 2, and intrinsic bioremediation data are summarized in Table 3. Copies of the laboratory report and chain-of-custody form are attached.

Remarks
Groundwater sample analytical results fall within historical concentration range for the site and appear to be decreasing.

Project Status

- The site is currently being monitored on a quarterly basis per the HCDEH directives. The next quarterly sampling event is scheduled for March 2006. Groundwater samples will be analyzed for TPHg, BTEX, and MTBE.

- Table 4 shows the groundwater monitoring schedule.

- Blue Rock is currently preparing for monitoring well destruction and reinstallation activities, which were proposed in Blue Rock's *Additional Assessment & Third Quarter 2005 Groundwater Monitoring Report,* dated September 28, 2005, and approved by the HCDEH in their letter dated December 14, 2005.

Response to HCDEH letter dated December 14, 2005

In this letter, the HCDEH provided two comments/recommendations, which are responded to below:

HCDEH Comment: *"We understand one of the new shallow monitoring wells produced enough water to collect a sample, whereas the other two were dry. We recommend developing the two apparently dry wells by adding water and using a surge block."*

Response: By the second monitoring event for these new wells, two of the three wells contained water. It is anticipated that water will enter the third well by the next planned monitoring event in March 2006 – near the end of the rainy season. Blue Rock recommends waiting until that time to allow for water to naturally enter the well. If water has not entered the well by that time, Blue Rock will contemplate the development method recommended by the HCDEH.

HCDEH Comment: *"We understand new monitoring well number Nine B (MW-9B) recorded an MTBe concentration of 860 ppb. We understand the direction of the hydraulic gradient was WNW during the last monitoring period. We recommend additional work be competed NW of MW-9B. Hole number SW-10 was completed in the meridian of South Fortuna Blvd. However, this hole, which was completed in 1991, did not include analysis for MTBe. In our opinion, the dissolved phase plume of MTBe is not delineated NW of MW-9B."*

Response: Existing data from the Humboldt Petroleum , Inc. (HPI) site located northwest of the subject site appear to address these concerns (Figure 2). HPI wells MW-4, MW-10, and MW-12 were plotted on the groundwater plume map shown on Figure 4b. These wells are located to the WNW, NW, and NNW of well MW-9B. None of these wells contains detectable levels of MTBE. If MTBE were present in the B-Zone at these locations, it would have likely been detected in these wells because they are screened from 5 – 20 feet bgs, which tap into the B-Zone. Although these wells may also be screened into the A-Zone also, it is likely that MTBE from either the A- or B-Zone would be detected in these wells if it were present. These well locations appear to define the B-Zone MTBE plume of the subject site to the NW.

Certification

This report was prepared under the supervision of a California Professional Geologist at Blue Rock. All statements, conclusions, and recommendations are based upon published results from past consultants, field observations by Blue Rock, and analyses performed by a state-certified laboratory as they relate to the time, location, and depth of points sampled by Blue Rock. Interpretation of data, including spatial distribution and temporal trends, are based on commonly used geologic and scientific principles. It is possible that interpretations, conclusions, and recommendations presented in this report may change, as additional data become available and/or regulations change.

Information and interpretation presented herein are for the sole use of the client and regulating agency. The information and interpretation contained in this document should not be relied upon by a third party.

The service performed by Blue Rock has been conducted in a manner consistent with the level of care and skill ordinarily exercised by members of our profession currently practicing under similar conditions in the area of the site. No other warranty, expressed or implied, is made.

If you have any questions regarding this project, please contact us at (707) 441-1934.

Sincerely,
Blue Rock Environmental, Inc.

Prepared by:

Scott Ferriman
Project Scientist

Reviewed by:

Brian Gwinn, PG
Principal Geologist

PROFESSIONAL GEOLOGIST
BRIAN M. GWINN
No 6505
exp. 4/30/07
STATE OF CALIFORNIA

Attachments:

- Table 1: Well Construction Details
- Table 2: Groundwater Elevations and Analytical Data
- Table 3: Intrinsic Bioremediation Data
- Table 4: Groundwater Monitoring Schedule
- Figure 1: Site Location Map
- Figure 2: Site Plan
- Figure 3: Groundwater Elevation Map – B-Zone– December 16, 2005
- Figure 4a: Groundwater Contaminant Map – A-Zone – December 16, 2005
- Figure 4b: Groundwater Contaminant Map – B-Zone – December 16, 2005
- Blue Rock Gauge/Purge Calculations and Well Purging Data field sheets
- Laboratory Analytical Report and Chain-of-Custody Form

Distribution:

- Mr. Clyde Harvey, 1785 Fort Douglas Circle, Salt Lake City, UT 84103
- Mr. Dennis O'Keefe, Golden Gate Petroleum, 501 Shell Avenue, Martinez, CA 94553

Table 1
WELL CONSTRUCTION DETAILS
Former Cash Oil Fortuna
409 South Fortuna Boulevard
Fortuna, California
Blue Rock Project No. NC-004

Monitoring Well Identification	Date Intstalled	Intstalled by	Casing Diameter (inches)	Total Depth (feet)	Blank Interval (feet)	Screened Interval (feet)	Slot Size (inches)	Filter Pack (feet)	Bentonite Seal (feet)	Cement Grout (feet)
MW-1	1/10/01	Clearwater	2	20	0-5	5-20	0.02	4.5-20	3-4.5	0-3
MW-2	1/11/01	Clearwater	2	15	0-5	5-15	0.02	4.5-15	3-4.5	0-3
MW-3*	1/10/01	Clearwater	2	20	0-5	5-20	0.02	4.5-20	3-4.5	0-3
MW-4	1/11/01	Clearwater	2	20	0-5	5-20	0.02	4.5-20	3-4.5	0-3
MW-5	3/2/02	Clearwater	2	20.5	0-5	5-20	0.02	4-20	3-4	0-3
MW-6	3/2/02	Clearwater	2	20.5	0-5	5-20	0.02	4-20	3-4	0-3
MW-7	3/2/02	Clearwater	2	20.5	0-5	5-20	0.02	4-20	3-4	0-3
MW-8	6/11/02	Clearwater	2	20	0-5	5-20	0.02	4-20	3-4	0-3
MW-9A	8/17/05	Blue Rock	2	9	0-4	4-10	0.01	3-10	2-3	0-2
MW-9B	8/17/05	Blue Rock	2	20	0-15	15-20	0.01	14-20	13-14	0-13
MW-10A	8/17/05	Blue Rock	2	9	0-4	4-10	0.01	3-10	2-3	0-2
MW-10B	8/17/05	Blue Rock	2	20	0-15	15-20	0.01	14-20	13-14	0-13
MW-11A	8/17/05	Blue Rock	2	9	0-4	4-10	0.01	3-10	2-3	0-2
MW-11B	8/17/05	Blue Rock	2	20	0-15	15-20	0.01	14-20	13-14	0-13

*MW-3 was removed during remedial excavation activities in 8/04.

Table 2
GROUNDWATER ELEVATIONS AND ANALYTICAL DATA
Former Cash Oil Fortuna
409 South Fortuna Boulevard
Fortuna, California
Blue Rock Project No. NC-004

Sample ID	Sample Date	TOC (feet)	DTW (feet)	SPH (feet)	GWE (feet)	TPHg (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	MTBE (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	Methanol (µg/L)	Ethanol (µg/L)
Grab Groundwater Samples																	
GW-3 (B-3)	5/8/99	--	--	0.00	--	**23,000**	**63**	**110**	**600**	**1,630**	<130	--	--	--	--	--	--
B-4	3/14/00	--	~7	0.00	--	**210**	**4.1**	<0.5	<0.5	**0.79**	<0.5	<10	<1	<1	<1	--	--
B-5	3/14/00	--	~5	0.00	--	<50	<0.5	<0.5	<0.5	<1	**0.79**	<10	<1	<1	<1	--	--
B-6	3/14/00	--	~4	0.00	--	**110**	<0.5	<0.5	<0.5	<1	<0.5	<10	<1	<1	<1	--	--
B-7	3/14/00	--	~4	0.00	--	<50	<0.5	<0.5	<0.5	<1	<0.5	<10	<1	<1	<1	--	--
B-8	3/14/00	--	~4	0.00	--	**19,000**	**18**	**2.4**	**20**	**3.8**	**1,100**	<100	<5	**12**	**91**	--	--
B-9	3/14/00	--	~4	0.00	--	**20,000**	**36**	**22**	**11**	<8	**3,900**	<200	<10	<10	**310**	--	--
B-10	3/14/00	--	~2.5	0.00	--	<63	<0.5	<0.5	<0.5	<1	<0.5	<13	<1	<1	<1	--	--
B-11	3/14/00	--	~4.5	0.00	--	**14,000**	**26**	**2.6**	**41**	**5**	**580**	<100	<5	<5	**12**	--	--
HP-9	8/29/05	--	~40	0.00	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--
HP-10	8/29/05	--	~40	0.00	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--
HP-11	8/29/05	--	~40	0.00	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--
Monitoring Well Groundwater Samples																	
MW-1	1/19/01	99.75	11.37	0.00	88.38	**4,900**	**5**	**1.1**	**14**	**2.3**	**200**	**29**	<1	**5.4**	**6.1**	<100	<10
Screen	5/4/01	99.75	11.29	0.00	88.46	**4,500**	**12**	<2	**7.8**	<2	**620**	**31**	<2	<2	**24**	<500	<20
5' - 20'	8/16/01	99.75	15.40	0.00	84.35	**7,700**	**13**	**1.7**	**23**	**2.6**	**280**	**16**	<0.5	**2.4**	**13**	<50	<5
	11/1/01	99.75	15.74	0.00	84.01	**3,100**	**10**	**0.85**	**9.8**	**1.4**	**220**	**22**	<0.5	**2.5**	**9.4**	<1,500	<5
	3/6/02	58.74	12.32	0.00	46.42	**7,700**	**28**	<2.5	**14**	<2.5	**980**	**39**	<2.5	**3.9**	**49**	--	--
	6/20/02	58.74	13.59	0.00	45.15	**3,400**	**33**	<2.5	**13**	<2.5	**1,100**	**40**	<2.5	**3**	**48**	--	--
	9/3/02	58.74	15.61	0.00	43.13	**1,500**	**6.2**	<2.5	<2.5	<2.5	**1,200**	**38**	<2.5	**2.9**	**40**	--	--
	12/11/02	58.74	16.31	0.00	42.43	**4,200**	**14**	<2	**9.8**	<2	**870**	**25**	<2	**2.4**	**27**	--	--
	3/7/03	58.74	12.37	0.00	46.37	**8,100**	**19**	<2.5	**15**	**3.9**	**1,300**	**39**	<2.5	<2.5	**52**	--	--
	6/3/03	58.74	11.96	0.00	46.78	**6,800**	**19**	<2.5	**12**	<2.5	**1,200**	**37**	<2.5	**3**	**54**	--	--
	9/2/03	58.74	15.21	0.00	43.53	**5,900**	**12**	<1.5	**13**	**1.7**	**800**	**27**	<1.5	**2.2**	**31**	--	--
	12/3/03	58.74	15.07	0.00	43.67	**6,100**	**6.8**	**1.5**	**15**	**2.5**	**730**	**29**	<1	**2.9**	**37**	--	--
	3/9/04	58.74	11.42	0.00	47.32	**5,500**	**11**	<2	**12**	<2	**940**	**37**	<2	**2.1**	**45**	--	--
	6/8/04	58.74	13.38	0.00	45.36	**7,000**	**11**	<5	**14**	<10	**780**	<50	<5	<5	**43**	--	--
	9/3/04	58.74	15.79	0.00	42.95	**810**	**6.8**	<1	**3.7**	<1	**400**	--	--	--	--	--	--
	12/8/04	58.74	12.79	0.00	45.95	**3,700**	**4.7**	**1.5**	**20**	**1.9**	**270**	--	--	--	--	--	--
	3/25/05	58.74	10.79	0.00	47.95	**7,400**	**4.8**	**1.4**	**21**	**1.4**	**240**	--	--	--	--	--	--
	6/13/05	58.74	12.14	0.00	46.60	**3,700**	**7.8**	**1.9**	**15**	**1.7**	**190**	--	--	--	--	--	--
	8/22/05	58.74	14.05	0.00	44.69	**2,600**	**6.3**	**0.87**	**6.8**	**1.0**	**130**	--	--	--	--	--	--
	12/16/05	58.74	13.26	0.00	45.48	**5,500**	**4.7**	**1.3**	**18**	**2.0**	**110**	--	--	--	--	--	--

Table 2
GROUNDWATER ELEVATIONS AND ANALYTICAL DATA
Former Cash Oil Fortuna
409 South Fortuna Boulevard
Fortuna, California
Blue Rock Project No. NC-004

Sample ID	Sample Date	TOC (feet)	DTW (feet)	SPH (feet)	GWE (feet)	TPHg (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	MTBE (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	Methanol (µg/L)	Ethanol (µg/L)
Monitoring Well Groundwater Samples																	
MW-2	1/19/01	99.24	12.41	0.00	86.83	<50	<0.5	<0.5	<0.5	<0.5	**2.4**	<5	<0.5	<0.5	<0.5	<50	<5
Screen	5/4/01	99.24	11.07	0.00	88.17	<50	<0.5	<0.5	<0.5	<0.5	**11**	<5	<0.5	<0.5	<0.5	<50	<5
5' - 15'	8/16/01	99.24	14.24	0.00	85.00	<50	<0.5	<0.5	<0.5	<0.5	**14**	<5	<0.5	<0.5	<0.5	<50	<5
	11/1/01	99.24	Dry	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	3/6/02	58.18	10.74	0.00	47.44	<50	<0.5	<0.5	<0.5	<0.5	**1.2**	<5	<0.5	<0.5	<0.5	--	--
	6/20/02	58.18	12.70	0.00	45.48	<50	<0.5	<0.5	<0.5	<0.5	**2.3**	<5	<0.5	<0.5	<0.5	--	--
	9/3/02	58.18	Dry	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	12/11/02	58.18	Dry	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	3/7/03	58.18	10.04	0.00	48.14	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<0.5	<0.5	--	--
	6/3/03	58.18	10.06	0.00	48.12	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<0.5	<0.5	--	--
	9/2/03	58.18	14.01	0.00	44.17	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<0.5	<0.5	--	--
	12/3/03	58.18	13.13	0.00	45.05	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<0.5	<0.5	--	--
	3/9/04	58.18	9.07	0.00	49.11	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<0.5	<0.5	--	--
	6/8/04	58.18	12.14	0.00	46.04	<50	<0.5	<0.5	<0.5	<1	<0.5	<5	<0.5	<0.5	<0.5	--	--
	9/3/04	58.18	14.55	0.00	43.63	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--
	12/8/04	58.18	8.51	0.00	49.67	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--
	3/25/05	58.18	8.63	0.00	49.55	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--
	6/13/05	58.18	10.26	0.00	47.92	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--
	8/22/05	58.18	13.00	0.00	45.18	--	--	--	--	--	--	--	--	--	--	--	--
	12/16/05	58.18	11.06	0.00	47.12	--	--	--	--	--	--	--	--	--	--	--	--
MW-3	1/19/01	99.77	9.88	0.00	89.89	<2,000	<20	<20	<20	<20	**15,000**	**560**	<20	<20	**490**	<2,000	<200
Screen	5/4/01	99.77	4.96	0.00	94.81	**4,800**	**630**	<20	**72**	**130**	**7,700**	**570**	<20	<20	**200**	<2,000	<200
5' - 20'	8/16/01	99.77	15.64	0.00	84.13	**1,300**	**14**	**0.98**	**1.6**	**1.1**	**6,800**	**320**	<0.5	**6**	**240**	<150	<5
	11/1/01	99.77	15.98	0.00	83.79	<2,000	<20	<20	<20	<20	**6,600**	**460**	<20	<20	**270**	<35,000	<200
	3/6/02	58.72	13.06	0.00	45.66	<2,000	<20	**21**	<20	<20	**6,600**	**240**	<20	<20	**160**	--	--
	6/20/02	58.72	11.70	0.00	47.02	**1,900**	**57**	<5	<5	<5	**2,900**	**90**	<5	<5	**140**	--	--
	9/3/02	58.72	15.53	0.00	43.19	<1,000	<10	<10	<10	<10	**3,300**	**130**	<10	<10	**110**	--	--
	12/11/02	58.72	16.48	0.00	42.24	<1,000	<10	<10	<10	<10	**3,600**	**110**	<10	<10	**110**	--	--
	3/7/03	58.72	4.18	0.00	54.54	**3,300**	**150**	**5.4**	**7.1**	**18**	**2,300**	**77**	<5	<5	**110**	--	--
	6/3/03	58.72	4.40	0.00	54.32	**3,000**	**100**	**4.4**	**4.2**	**12**	**1,900**	**56**	<2.5	<2.5	**96**	--	--
	9/2/03	58.72	14.69	0.00	44.03	<500	<5	<5	<5	<5	**2,300**	**68**	<5	<5	**80**	--	--
	12/3/03	58.72	14.79	0.00	43.93	**1,600**	**89**	<5	<5	**8.1**	**2,300**	**78**	<5	<5	**120**	--	--
	3/9/04	58.72	7.90	0.00	50.82	**1,500**	**23**	<3	<3	**4.9**	**1,400**	**62**	<3	<3	**68**	--	--
	6/8/04	58.72	11.28	0.00	47.44	<5,000	<50	<50	<50	<100	**1,800**	<500	<50	<50	**89**	--	--
	8/13/04	Removed during remedial soil excavation activities															

Table 2
GROUNDWATER ELEVATIONS AND ANALYTICAL DATA
Former Cash Oil Fortuna
409 South Fortuna Boulevard
Fortuna, California
Blue Rock Project No. NC-004

Sample ID	Sample Date	TOC (feet)	DTW (feet)	SPH (feet)	GWE (feet)	TPHg (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	MTBE (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	Methanol (µg/L)	Ethanol (µg/L)
Monitoring Well Groundwater Samples																	
MW-4	1/19/01	99.12	12.17	0.00	86.95	**150**	<1	<1	<1	<1	**680**	**210**	<1	<1	**11**	<100	<10
Screen	5/4/01	99.12	10.71	0.00	88.41	<200	<2	<2	<2	<2	**440**	**120**	<2	<2	**16**	<200	<20
5' - 20'	8/16/01	99.12	14.83	0.00	84.29	<50	<0.5	<0.5	<0.5	<0.5	**250**	<5	<0.5	<0.5	**10**	<50	<5
	11/1/01	99.12	14.76	0.00	84.36	**61**	<0.5	<0.5	<0.5	<0.5	**210**	**18**	<0.5	<0.5	**8.5**	<50	<5
	3/6/02	58.07	10.28	0.00	47.79	**220**	<0.5	<0.5	<0.5	<0.5	**130**	**40**	<0.5	<0.5	**5.4**	--	--
	6/20/02	58.07	12.41	0.00	45.66	<50	<0.5	<0.5	<0.5	<0.5	**440**	**32**	<0.5	<0.5	**20**	--	--
	9/3/02	58.07	14.34	0.00	43.73	<250	<2.5	<2.5	<2.5	<2.5	**1,300**	**35**	<2.5	<2.5	**34**	--	--
	12/11/02	58.07	15.23	0.00	42.84	<500	<5	<5	<5	<5	**2,300**	<50	<5	<5	**54**	--	--
	3/7/03	58.07	10.48	0.00	47.59	**330**	<1	<1	<1	<1	**570**	**33**	<1	<1	**28**	--	--
	6/3/03	58.07	10.12	0.00	47.95	**130**	<0.5	<0.5	<0.5	<0.5	**380**	**19**	<0.5	<0.5	**23**	--	--
	9/2/03	58.07	13.82	0.00	44.25	**85**	<0.5	<0.5	<0.5	<0.5	**390**	**12**	<0.5	<0.5	**17**	--	--
	12/3/03	58.07	13.91	0.00	44.16	**220**	<0.5	<0.5	<0.5	<0.5	**510**	**31**	<0.5	<0.5	**22**	--	--
	3/9/04	58.07	9.51	0.00	48.56	<500	<5	<5	<5	<5	**2,000**	**220**	<5	<5	**5.6**	--	--
	6/8/04	58.07	12.03	0.00	46.04	**210**	<0.5	<0.5	<0.5	<1	**420**	**25**	<0.5	<0.5	**1.5**	--	--
	9/3/04	58.07	14.41	0.00	43.66	<100	<1	<1	<1	<1	**430**	--	--	--	--	--	--
	12/8/04	58.07	10.72	0.00	47.35	<50	<0.5	<0.5	<0.5	<0.5	**140**	--	--	--	--	--	--
	3/25/05	58.07	8.97	0.00	49.10	<50	<0.5	<0.5	<0.5	<0.5	**40**	--	--	--	--	--	--
	6/13/05	58.07	10.27	0.00	47.80	<50	<0.5	<0.5	<0.5	<0.5	**22**	--	--	--	--	--	--
	8/22/05	58.07	12.72	0.00	45.35	<50	<0.5	<0.5	<0.5	<0.5	**29**	--	--	--	--	--	--
	12/16/05	58.07	11.13	0.00	46.94	<50	<0.5	<0.5	<0.5	<0.5	**13**	--	--	--	--	--	--
MW-5	3/6/02	58.37	4.39	0.00	53.98	<50	<0.5	<0.5	<0.5	<0.5	**0.53**	<5	<0.5	<0.5	<0.5	--	--
Screen	6/20/02	58.49	12.50	0.00	45.99	<50	<0.5	<0.5	<0.5	**0.56**	<0.5	<5	<0.5	<0.5	<0.5	--	--
5' - 20'	9/3/02	58.49	14.49	0.00	44.00	<50	<0.5	<0.5	<0.5	<0.5	**1.3**	<5	<0.5	<0.5	<0.5	--	--
	12/11/02	58.49	15.39	0.00	43.10	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<0.5	<0.5	--	--
	3/7/03	58.49	8.76	0.00	49.73	<50	<0.5	<0.5	<0.5	<0.5	**0.95**	<5	<0.5	<0.5	<0.5	--	--
	6/3/03	58.49	8.12	0.00	50.37	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<0.5	<0.5	--	--
	9/2/03	58.49	14.02	0.00	44.47	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<0.5	<0.5	--	--
	12/3/03	58.49	14.04	0.00	44.45	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<0.5	<0.5	--	--
	3/9/04	58.49	6.35	0.00	52.14	<50	<0.5	<0.5	<0.5	<0.5	**1.1**	<5	<0.5	<0.5	<0.5	--	--
	6/8/04	58.49	11.95	0.00	46.54	<50	<0.5	<0.5	<0.5	<1	<0.5	<5	<0.5	<0.5	<0.5	--	--
	9/3/04	58.49	14.50	0.00	43.99	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--
	12/8/04	58.49	5.71	0.00	52.78	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--
	3/25/05	58.49	3.71	0.00	54.78	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--
	6/13/05	58.49	10.38	0.00	48.11	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--
	8/22/05	58.49	13.11	0.00	45.38	--	--	--	--	--	--	--	--	--	--	--	--
	12/16/05	58.49	10.38	0.00	48.11	--	--	--	--	--	--	--	--	--	--	--	--

Table 2
GROUNDWATER ELEVATIONS AND ANALYTICAL DATA
Former Cash Oil Fortuna
409 South Fortuna Boulevard
Fortuna, California
Blue Rock Project No. NC-004

Sample ID	Sample Date	TOC (feet)	DTW (feet)	SPH (feet)	GWE (feet)	TPHg (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	MTBE (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	Methanol (µg/L)	Ethanol (µg/L)
Monitoring Well Groundwater Samples																	
MW-6	3/6/02	58.02	10.28	0.00	47.74	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<0.5	<0.5	--	--
Screen	6/20/02	58.02	12.62	0.00	45.40	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<0.5	<0.5	--	--
5' - 20'	9/3/03	58.02	14.33	0.00	43.69	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<0.5	<0.5	--	--
	12/11/02	58.02	15.28	0.00	42.74	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<0.5	<0.5	--	--
	3/7/03	58.02	10.67	0.00	47.35	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<0.5	<0.5	--	--
	6/3/03	58.02	10.37	0.00	47.65	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<0.5	<0.5	--	--
	9/2/03	58.02	13.87	0.00	44.15	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<0.5	<0.5	--	--
	12/3/03	58.02	14.38	0.00	43.64	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<0.5	<0.5	--	--
	3/9/04	58.02	9.62	0.00	48.40	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<0.5	<0.5	--	--
	6/8/04	58.02	12.20	0.00	45.82	<50	<0.5	<0.5	<0.5	<1	<0.5	<5	<0.5	<0.5	<0.5	--	--
	9/3/04	58.02	14.48	0.00	43.54	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--
	12/8/04	58.02	12.95	0.00	45.07	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--
	3/25/05	58.02	10.45	0.00	47.57	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--
	6/13/05	58.02	10.70	0.00	47.32	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--
	8/22/05	58.02	12.84	0.00	45.18	--	--	--	--	--	--	--	--	--	--	--	--
	12/16/05	58.02	11.64	0.00	46.38	--	--	--	--	--	--	--	--	--	--	--	--
MW-7	3/6/02	58.42	3.68	0.00	54.74	**110**	<0.5	<0.5	<0.5	<0.5	**78**	<5	<0.5	<0.5	**1.4**	--	--
Screen	6/20/02	58.42	4.27	0.00	54.15	**200**	<0.5	<0.5	<0.5	<0.5	**26**	<5	<0.5	<0.5	**0.7**	--	--
5' - 20'	9/3/02	58.42	5.77	0.00	52.65	**250**	<0.5	<0.5	<0.5	**2.5**	**30**	**15**	<0.5	<0.5	**0.51**	--	--
	12/11/02	58.42	6.21	0.00	52.21	**360**	<0.5	<0.5	<0.5	**4.5**	**37**	**9.2**	<0.5	<0.5	**0.74**	--	--
	3/7/03	58.42	3.80	0.00	54.62	**780**	<0.5	<0.5	**1.1**	**3.8**	**21**	<5	<0.5	<0.5	<0.5	--	--
	6/3/03	58.42	3.47	0.00	54.95	**650**	<0.5	<0.5	**0.85**	**2.6**	**17**	**5.3**	<0.5	<0.5	<0.5	--	--
	9/2/03	58.42	4.70	0.00	53.72	**470**	<0.5	<0.5	**0.59**	**1.6**	**13**	**7.5**	<0.5	<0.5	<0.5	--	--
	12/3/03	58.42	4.78	0.00	53.64	**490**	<0.5	<0.5	**0.64**	**1.5**	**17**	<5	<0.5	<0.5	<0.5	--	--
	3/9/04	58.42	3.45	0.00	54.97	**530**	<0.5	<0.5	**0.9**	**1.7**	**16**	**8.9**	<0.5	<0.5	<0.5	--	--
	6/8/04	58.42	3.75	0.00	54.67	**540**	<0.5	<0.5	**0.7**	**0.8**	**11**	<5	<0.5	<0.5	<0.5	--	--
	9/3/04	58.42	5.33	0.00	53.09	**290**	<0.5	<0.5	<0.5	**0.9**	**8.1**	--	--	--	--	--	--
	12/8/04	58.42	2.75	0.00	55.67	**670**	**0.57**	<0.5	**1.2**	**0.85**	**13**	--	--	--	--	--	--
	3/25/05	58.42	3.24	0.00	55.18	**1,100**	**0.56**	**0.58**	**2.8**	**0.92**	**8.4**	--	--	--	--	--	--
	6/13/05	58.42	3.87	0.00	54.55	**770**	<0.5	<0.5	**1.1**	**0.80**	**6.0**	--	--	--	--	--	--
	8/22/05	58.42	4.38	0.00	54.04	**530**	<0.5	<0.5	<0.5	<0.5	**2.7**	--	--	--	--	--	--
	12/16/05	58.42	3.72	0.00	54.70	**540**	<0.5	<0.5	<0.5	<0.5	**4.4**	--	--	--	--	--	--

Table 2
GROUNDWATER ELEVATIONS AND ANALYTICAL DATA
Former Cash Oil Fortuna
409 South Fortuna Boulevard
Fortuna, California
Blue Rock Project No. NC-004

Sample ID	Sample Date	TOC (feet)	DTW (feet)	SPH (feet)	GWE (feet)	TPHg (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	MTBE (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	Methanol (µg/L)	Ethanol (µg/L)
Monitoring Well Groundwater Samples																	
MW-8	6/20/02	58.81	4.75	0.00	54.06	<50	<0.5	<0.5	<0.5	<0.5	**14**	<5	<0.5	<0.5	**0.52**	--	--
Screen	9/3/02	58.81	14.76	0.00	44.05	<50	<0.5	<0.5	<0.5	**0.63**	**11**	<5	<0.5	<0.5	<0.5	--	--
5' - 20'	12/11/02	58.81	16.55	0.00	42.26	**92**	<0.5	<0.5	<0.5	**2.1**	**21**	<5	<0.5	<0.5	**1.1**	--	--
	3/7/03	58.81	11.89	0.00	46.92	**67**	<0.5	<0.5	<0.5	<0.5	**17**	<5	<0.5	<0.5	**0.99**	--	--
	6/3/03	58.81	11.67	0.00	47.14	<50	<0.5	<0.5	<0.5	<0.5	**25**	<5	<0.5	<0.5	**1.5**	--	--
	9/2/03	58.81	15.53	0.00	43.28	**51**	<0.5	<0.5	<0.5	<0.5	**56**	<5	<0.5	<0.5	**3.6**	--	--
	12/3/03	58.81	15.31	0.00	43.50	**57**	<0.5	<0.5	<0.5	<0.5	**10**	<5	<0.5	<0.5	<0.5	--	--
	3/9/04	58.81	9.82	0.00	48.99	<50	<0.5	<0.5	<0.5	<0.5	**4.3**	<5	<0.5	<0.5	<0.5	--	--
	6/8/04	58.81	13.28	0.00	45.53	<50	<0.5	<0.5	<0.5	<0.5	**37**	<5	<0.5	<0.5	**0.9**	--	--
	9/3/04	58.81	15.68	0.00	43.13	<50	<0.5	<0.5	<0.5	<0.5	**21**	--	--	--	--	--	--
	12/8/04	58.81	13.47	0.00	45.34	<50	<0.5	<0.5	<0.5	<0.5	**41**	--	--	--	--	--	--
	3/25/05	58.81	11.26	0.00	47.55	<50	<0.5	<0.5	<0.5	<0.5	**16**	--	--	--	--	--	--
	6/13/05	58.81	11.85	0.00	46.96	<50	<0.5	<0.5	<0.5	<0.5	**5.6**	--	--	--	--	--	--
	8/22/05	58.81	14.11	0.00	44.70	<50	<0.5	<0.5	<0.5	<0.5	**10**	--	--	--	--	--	--
	12/16/05	58.81	12.90	0.00	45.91	<50	<0.5	<0.5	<0.5	<0.5	**5.2**	--	--	--	--	--	--
MW-9A	8/22/05	58.57	--	--	--	well dry, no sample		--	--	--	--	--	--	--	--	--	--
Screen	12/16/05	58.57	4.26	0.00	54.31	<50	<0.5	<0.5	<0.5	<0.5	**2.0**	--	--	--	--	--	--
4' - 10'																	
MW-9B	8/22/05	58.54	14.28	0.00	44.26	**220**	**1.6**	<1	<1	**1.0**	**860**	--	--	--	--	--	--
Screen	12/16/05	58.54	13.39	0.00	45.15	**120**	<1	<1	<1	<1	**1,000**	--	--	--	--	--	--
15' - 20'																	
MW-10A	8/22/05	58.52	4.53	0.00	53.99	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--
Screen	12/16/05	58.52	3.28	0.00	55.24	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--
4' - 10'																	
MW-10B	8/22/05	58.56	13.58	0.00	44.98	<50	<0.5	<0.5	<0.5	<0.5	**5.3**	--	--	--	--	--	--
Screen	12/16/05	58.56	10.91	0.00	47.65	<50	<0.5	<0.5	<0.5	<0.5	**1.8**	--	--	--	--	--	--
15' - 20'																	
MW-11A	8/22/05	58.18	--	--	--	well dry, no sample		--	--	--	--	--	--	--	--	--	--
Screen	12/16/05	58.18	--	--	--	well dry, no sample		--	--	--	--	--	--	--	--	--	--
4' - 10'																	

Table 2
GROUNDWATER ELEVATIONS AND ANALYTICAL DATA
Former Cash Oil Fortuna
409 South Fortuna Boulevard
Fortuna, California
Blue Rock Project No. NC-004

Sample ID	Sample Date	TOC (feet)	DTW (feet)	SPH (feet)	GWE (feet)	TPHg (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	MTBE (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	Methanol (µg/L)	Ethanol (µg/L)
MW-11B	8/22/05	58.39	13.14	0.00	45.25	<50	<0.5	<0.5	<0.5	<0.5	**160**	--	--	--	--	--	--
Screen	12/16/05	58.39	10.85	0.00	47.54	<50	<0.5	<0.5	<0.5	<0.5	**180**	--	--	--	--	--	--
15' - 20'																	
Monitoring Well Groundwater Samples																	
MW-16	6/20/02	57.54	12.79	0.00	44.75	--	--	--	--	--	--	--	--	--	--	--	--
(Humboldt	9/3/02	57.54	14.49	0.00	43.05	--	--	--	--	--	--	--	--	--	--	--	--
Pet. Well)	12/11/02	57.54	15.41	0.00	42.13	--	--	--	--	--	--	--	--	--	--	--	--
Screen	3/7/03	57.54	10.90	0.00	46.64	--	--	--	--	--	--	--	--	--	--	--	--
10' - 20'	6/3/03	57.54	10.76	0.00	46.78	--	--	--	--	--	--	--	--	--	--	--	--
	9/2/03	57.54	14.24	0.00	43.30	--	--	--	--	--	--	--	--	--	--	--	--
	12/3/03	57.54	14.71	0.00	42.83	--	--	--	--	--	--	--	--	--	--	--	--
	3/9/04	57.54	10.32	0.00	47.22	--	--	--	--	--	--	--	--	--	--	--	--
	6/8/04	57.54	12.33	0.00	45.21	--	--	--	--	--	--	--	--	--	--	--	--
	9/3/04	57.54	14.76	0.00	42.78	--	--	--	--	--	--	--	--	--	--	--	--
	12/8/04	57.54	13.27	0.00	44.27	--	--	--	--	--	--	--	--	--	--	--	--
	3/25/05	57.54	10.91	0.00	46.63	--	--	--	--	--	--	--	--	--	--	--	--
	6/13/05	57.54	11.03	0.00	46.51	--	--	--	--	--	--	--	--	--	--	--	--
	8/22/05	57.54	13.04	0.00	44.50	<50	<0.5	<0.5	<0.5	<0.5	**57**	--	--	--	--	--	--
	12/16/05	57.54	12.07	0.00	45.47	<50	<0.5	<0.5	<0.5	<0.5	**8.2**	--	--	--	--	--	--
					MCL	---	1.0	150	300	1,750	13						
					Taste and odor threshold	5	---	42	29	17	5						
					NCRWQCB Cleanup Goals	50	0.5	42	29	17	5						

Notes :

TOC: Top of well casing referenced to arbitrary site benchmark until 3/02, MSL thereafter
DTW: Depth to water as referenced to top of casing
SPH: Separate phase hydrocarbon on top of groundwater
GWE: Groundwater elevation as referenced to benchmark
µg/L = micrograms per liter
TPHg: Total petroleum hydrocarbons as gasoline by Method 5030/8015M or 5030/8260B
MTBE: Methyl tertiary butyl ether by Method 8020 or 8260B
MW-16 (LOP #12093) was used for the purpose of obtaining additional groundwater gradient and direction data.

TBA: Tertiary butyl alcohol by Method 8260B
DIPE: Di isopropyl ether by Method 8260B
ETBE: Ethyl tertiary butyl ether by Method 8260B
TAME: Tertiary amyl methyl ether by method 8260B
Methanol: by EPA Method 8260B
Ethanol: by EPA Method 8260B
MCL : Maximum contaminant level
NCRWQCB : North Coast Region Water Quality Control Board

Table 3
INTRINSIC BIOREMEDIATION DATA
Former Cash Oil Fortuna
409 South Fortuna Boulevard
Fortuna, California
Blue Rock Project # NC-004

Well ID	Date	TPHg (µg/L)	MTBE (µg/L)	DO* (mg/L)	Eh* (mV)	pH*	Total Alkalinity (mg/L)	Nitrate (mg/L)	Ammonia (mg/L)	Sulfate (mg/L)	Sulfide (mg/L)	Ortho Phosphate (mg/L)	Ferrous Iron (mg/L)	Dissolved Manganese (mg/L)	TOC (mg/L)	BOD (mg/L)	COD (mg/L)	Heterotrophic Plate Count (CFU/mL)	Aerobic Hydrocarbon Degraders (CFU/mL)
MW-1	6/20/02	3,400	1,100	0.41	--	6.4	310	0.56	7.6	1.6	--	<0.5	7.4	--	52	5.4	97	7,000	1,000
	12/11/02	4,200	870	2.91	80	5.8	370	0.87	7.9	0.87	<1	<0.5	8.1	6,800	39	12	120	20,000	50
	9/3/04	810	400	1.87	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	12/8/04	3,700	270	1.80	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	3/25/05	7,400	240	0.65	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	6/13/05	3,700	190	3.16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	8/22/05	2,600	130	2.56	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	12/16/05	5,500	110	2.04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-2	6/20/02	<50	2.3	0.47	0.47	6.5	--	--	--	--	--	--	--	--	--	--	--	--	--
	12/11/02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	9/3/04	<50	<0.5	2.08	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	12/8/04	<50	<0.5	2.23	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	3/25/05	<50	<0.5	5.78	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	6/13/05	<50	<0.5	4.25	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	8/22/05	--	--	3.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	12/16/05	--	--	4.67	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-3	6/20/02	1,900	2,900	0.42	--	6.5	340	0.54	10	1.2	--	<0.5	8.2	--	44	4.2	110	20,000	3,000
	12/11/02	<1,000	3,600	3.12	50	4.4	350	0.94	10	1.4	<1	<0.5	6.9	17,000	32	12	110	20,000	300
MW-4	6/20/02	<50	440	0.62	--	6.4	--	--	--	--	--	--	--	--	--	--	--	--	--
	12/11/02	<500	2,300	2.87	165	6.0	--	--	--	--	--	--	--	--	--	--	--	--	--
	9/3/04	<100	430	1.96	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	12/8/04	<50	140	1.95	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	3/25/05	<50	40	0.40	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	6/13/05	<50	22	0.60	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	8/22/05	<50	29	0.66	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	12/16/05	<50	13	0.68	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-5	6/20/02	<50	<0.5	0.57	--	6.4	--	--	--	--	--	--	--	--	--	--	--	--	--
	12/11/02	<50	<0.5	2.71	197	6.1	--	--	--	--	--	--	--	--	--	--	--	--	--
	9/3/04	<50	<0.5	2.36	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	12/8/04	<50	<0.5	2.08	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	3/25/05	<50	<0.5	4.17	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	6/13/05	<50	<0.5	4.50	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	8/22/05	--	--	1.63	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	12/16/05	--	--	2.47	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Table 3
INTRINSIC BIOREMEDIATION DATA
Former Cash Oil Fortuna
409 South Fortuna Boulevard
Fortuna, California
Blue Rock Project # NC-004

Well ID	Date	TPHg (µg/L)	MTBE (µg/L)	DO* (mg/L)	Eh* (mV)	pH*	Total Alkalinity (mg/L)	Nitrate (mg/L)	Ammonia (mg/L)	Sulfate (mg/L)	Sulfide (mg/L)	Ortho Phosphate (mg/L)	Ferrous Iron (mg/L)	Dissolved Manganese (mg/L)	TOC (mg/L)	BOD (mg/L)	COD (mg/L)	Heterotrophic Plate Count (CFU/mL)	Aerobic Hydrocarbon Degraders (CFU/mL)
MW-6	6/20/02	<50	<0.5	0.56	--	6.4	87	13	<0.1	6.9	--	<0.5	<0.1	--	4.2	<3	13	200,000	40,000
	12/11/02	<50	<0.5	3.25	146	5.9	85	12	0.16	4.4	<1	<0.5	<0.1	18	3.2	<3	<10	80,000	200
	9/3/04	<50	<0.5	2.11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	12/8/04	<50	<0.5	2.04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	3/25/05	<50	<0.5	4.27	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	6/13/05	<50	<0.5	4.61	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	8/22/05	--	--	5.91	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	12/16/05	--	--	6.45	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-7	6/20/02	200	26	0.61	--	6.6	--	--	--	--	--	--	--	--	--	--	--	--	--
	12/11/02	360	37	2.78	21	5.9	--	--	--	--	--	--	--	--	--	--	--	--	--
	9/3/04	290	8.1	2.12	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	12/8/04	670	13	1.57	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	3/25/05	1,100	8.4	0.47	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	6/13/05	770	6.0	0.51	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	8/22/05	530	2.7	0.51	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	12/16/05	540	4.4	0.58	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-8	6/20/02	<50	14	0.58	--	6.5	--	--	--	--	--	--	--	--	--	--	--	--	--
	12/11/02	92	21	2.37	79	5.9	--	--	--	--	--	--	--	--	--	--	--	--	--
	9/3/04	<50	21	1.99	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	12/8/04	<50	41	2.20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	3/25/05	<50	16	2.13	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	6/13/05	<50	5.6	0.72	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	8/22/05	<50	10	0.67	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	12/16/05	<50	5.2	0.61	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Table 3
INTRINSIC BIOREMEDIATION DATA
Former Cash Oil Fortuna
409 South Fortuna Boulevard
Fortuna, California
Blue Rock Project # NC-004

Well ID	Date	TPHg (µg/L)	MTBE (µg/L)	DO* (mg/L)	Eh* (mV)	pH*	Total Alkalinity (mg/L)	Nitrate (mg/L)	Ammonia (mg/L)	Sulfate (mg/L)	Sulfide (mg/L)	Ortho Phosphate (mg/L)	Ferrous Iron (mg/L)	Dissolved Manganese (mg/L)	TOC (mg/L)	BOD (mg/L)	COD (mg/L)	Heterotrophic Plate Count (CFU/mL)	Aerobic Hydrocarbon Degraders (CFU/mL)
MW-9A	8/22/05	dry	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	12/16/05	<50	2.0	4.30	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-9B	8/22/05	220	860	3.37	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	12/16/05	120	1,000	1.10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-10A	8/22/05	<50	<0.5	6.11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	12/16/05	<50	<0.5	2.09	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-10B	8/22/05	<50	5.3	7.04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	12/16/05	<50	1.8	5.64	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-11A	8/22/05	dry	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	12/16/05	dry	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-11B	8/22/05	<50	160	2.81	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	12/16/05	<50	180	0.65	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-16 (HPI)	8/22/05	<50	57	1.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	12/16/05	<50	8.2	0.90	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

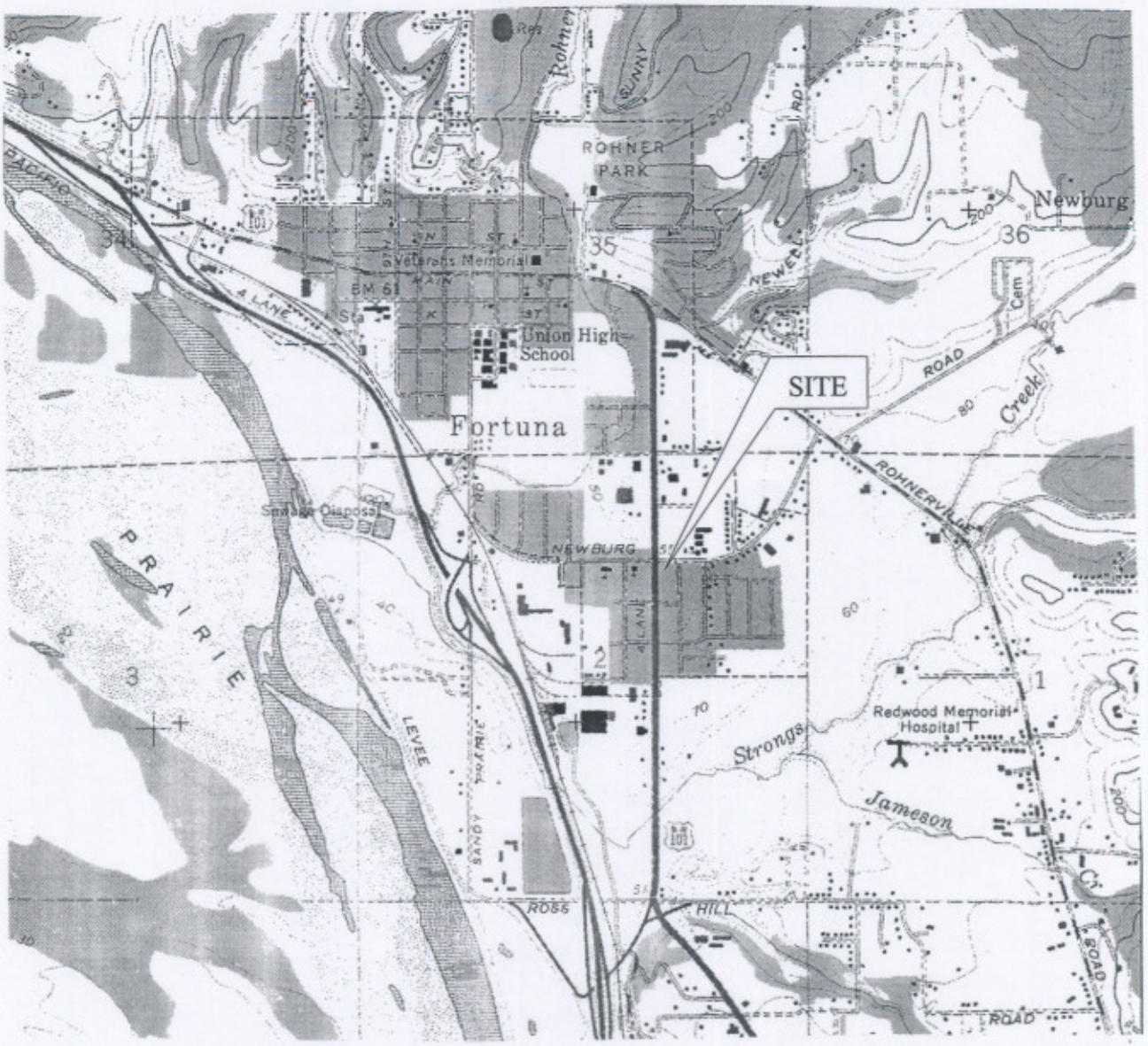
Notes:

TPHg	Total petroleum hydrocarbons as gasoline by EPA Method 5030/8260B
MTBE	Methyl tertiary butyl ether by EPA Method 8260B
µg/L	micrograms per liter, equivalent to parts per billion - ppb
mg/L	milligrams per Liter, equivalent to parts per million - ppm
*	Parameters measured in field and recorded on field sheets
mV	Millivolts
CFU/mL	Colony forming units per milliliter
DO	Dissolved oxygen measured with downhole meter
Eh	Reduction-oxidation potential measured with downhole meter
pH	pH measured with field meter
Alkalinity	by EPA Method 310.1
Nitrate	by EPA Method 300.0
Ammonia	by EPA Method 350.2
Manganese	by EPA Method 200.7
Sulfate	by EPA Method 375.4
Sulfide	by EPA Method 376.2
Phosphate	by EPA Method 365.2
TOC	Total organic carbon by EPA Method 9060
Ferrous Iron	by Standard Method 3500
BOD	Biological oxygen demand by Standard Method 5210B
COD	Chemical oxygen demand by EPA Method 410.4
Heterotrophic Plate Count	Bacteria enumeration assay by Standard Method 9215B modified
Hydrocarbon Degraders	Bacteria enumeration assay for diesel and gasoline degraders
"--":	Not analyzed, available, or applicable
<###	Not detected above the number indicated

Table 4
GROUNDWATER MONITORING SCHEDULE
Former Cash Oil Fortuna, 409 South Fortuna Boulevard, Fortuna CA
Blue Rock Project # NC-004

Well	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Notes
MW-1	X	X	X	X	Plume Core
MW-2	X				Clean Well
MW-4	X	X	X	X	Plume Edge
MW-5	X				Clean Well
MW-6	X				Clean Well
MW-7	X	X	X	X	Plume Edge
MW-8	X	X	X	X	Plume Edge
MW-9A	X	X	X	X	New Well
MW-9B	X	X	X	X	New Well
MW-10A	X	X	X	X	New Well
MW-10B	X	X	X	X	New Well
MW-11A	X	X	X	X	New Well
MW-11B	X	X	X	X	New Well
MW-16	X	X	X	X	Plume Edge

Samples from all monitoring wells will be analyzed for TPHg, BTEX and MTBE by EPA Method 8260B.
Depth to water and dissolved oxygen measurements will be collected from each well every quarter.



SCALE 1:24 000

1 MILE

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 KILOMETER

CONTOUR INTERVAL 40 FEET

N

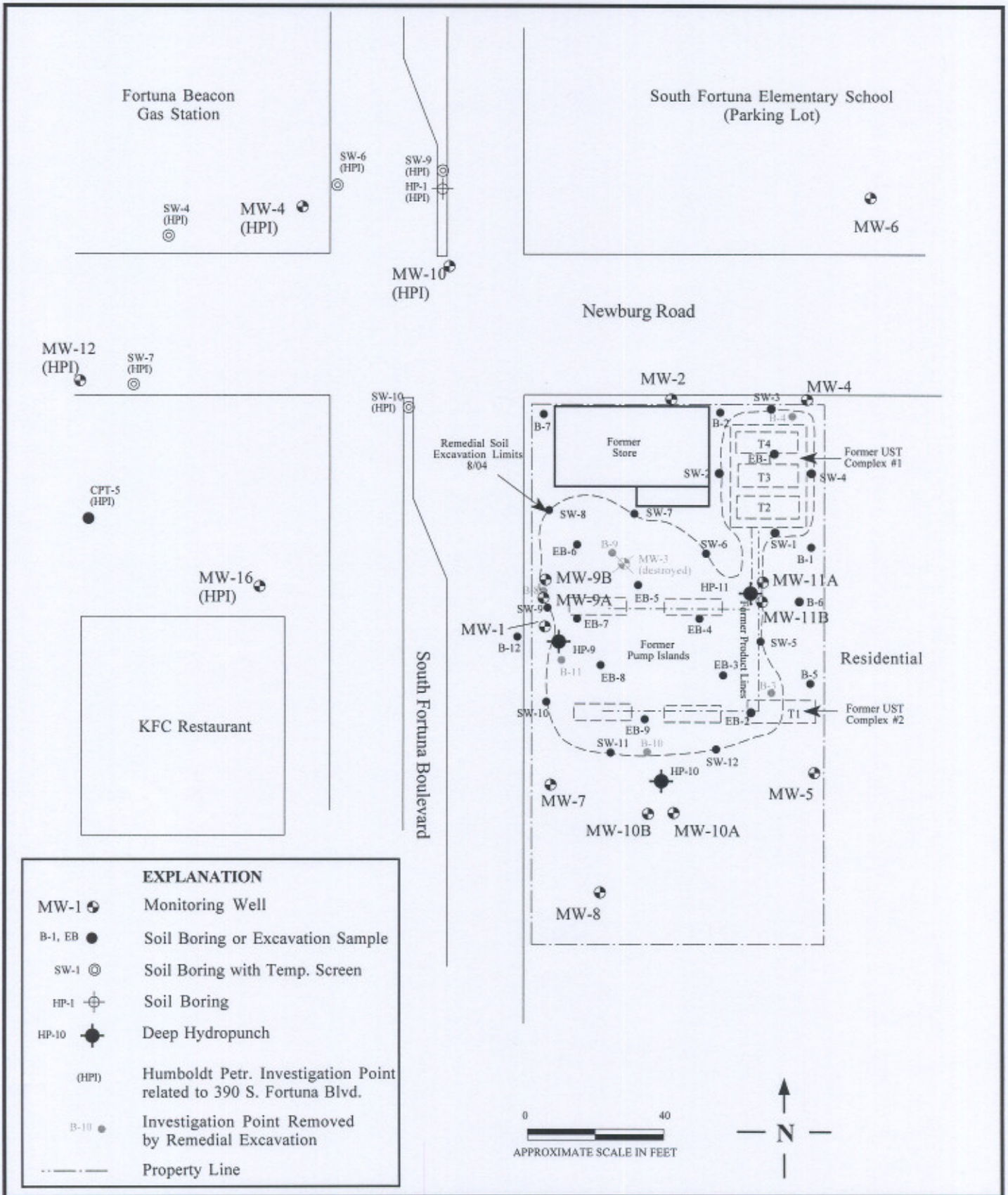
MAP SOURCE: USGS Fortuna Quadrangle

Site Location Map

Former Cash Oil Fortuna
409 South Fortuna Boulevard
Fortuna, California

BLUE ROCK ENVIRONMENTAL, INC.

Project No.	Date	Figure
NC-004	4/04	1

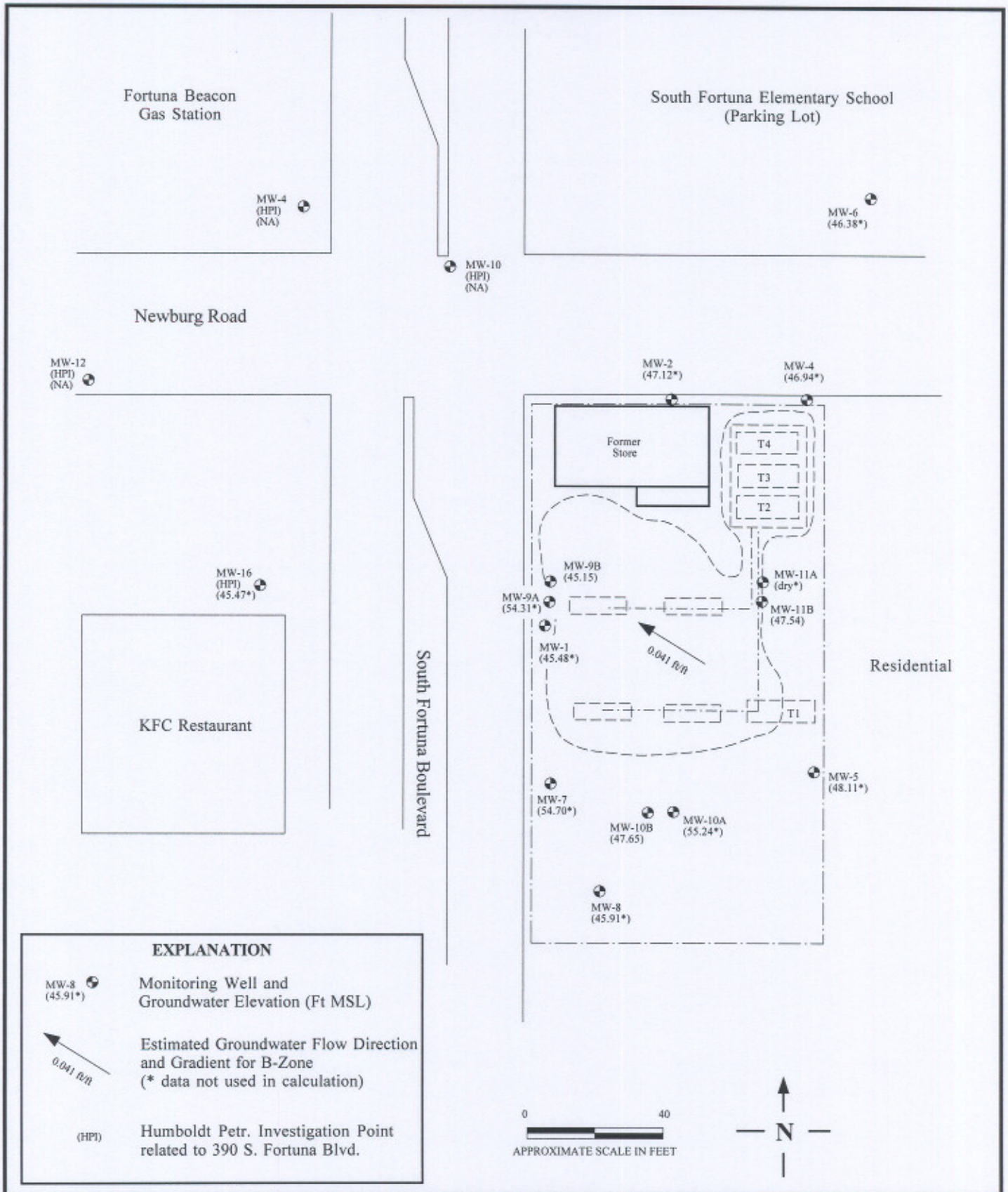


Site Plan

Former Cash Oil Fortuna
409 South Fortuna Boulevard
Fortuna, California

BLUE ROCK ENVIRONMENTAL, INC.

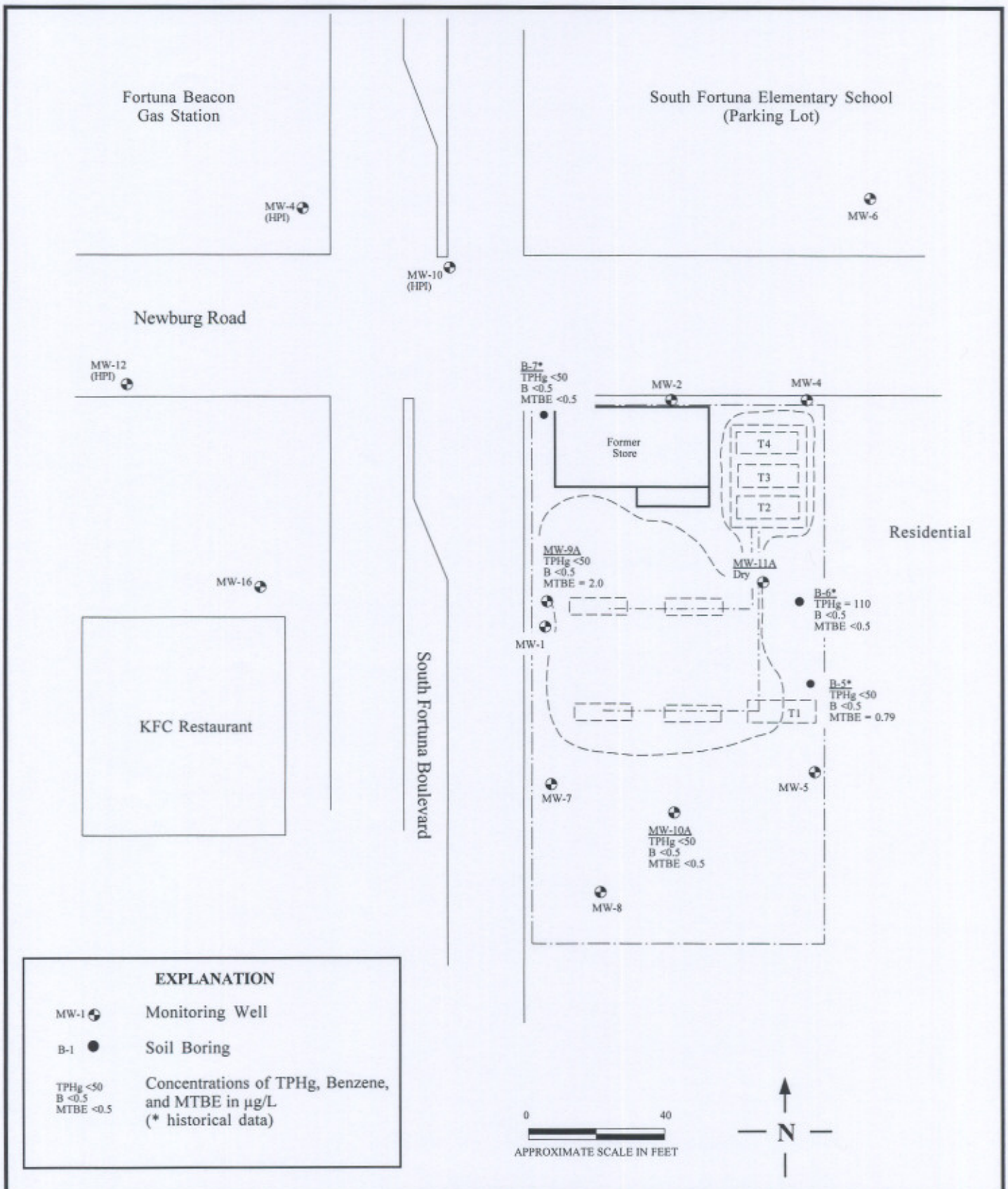
Project No.	Report Date	Figure
NC-004	1/06	2



Groundwater Elevation Map - B-Zone
December 16, 2005
Former Cash Oil Fortuna
409 South Fortuna Boulevard
Fortuna, California

BLUE ROCK ENVIRONMENTAL, INC.

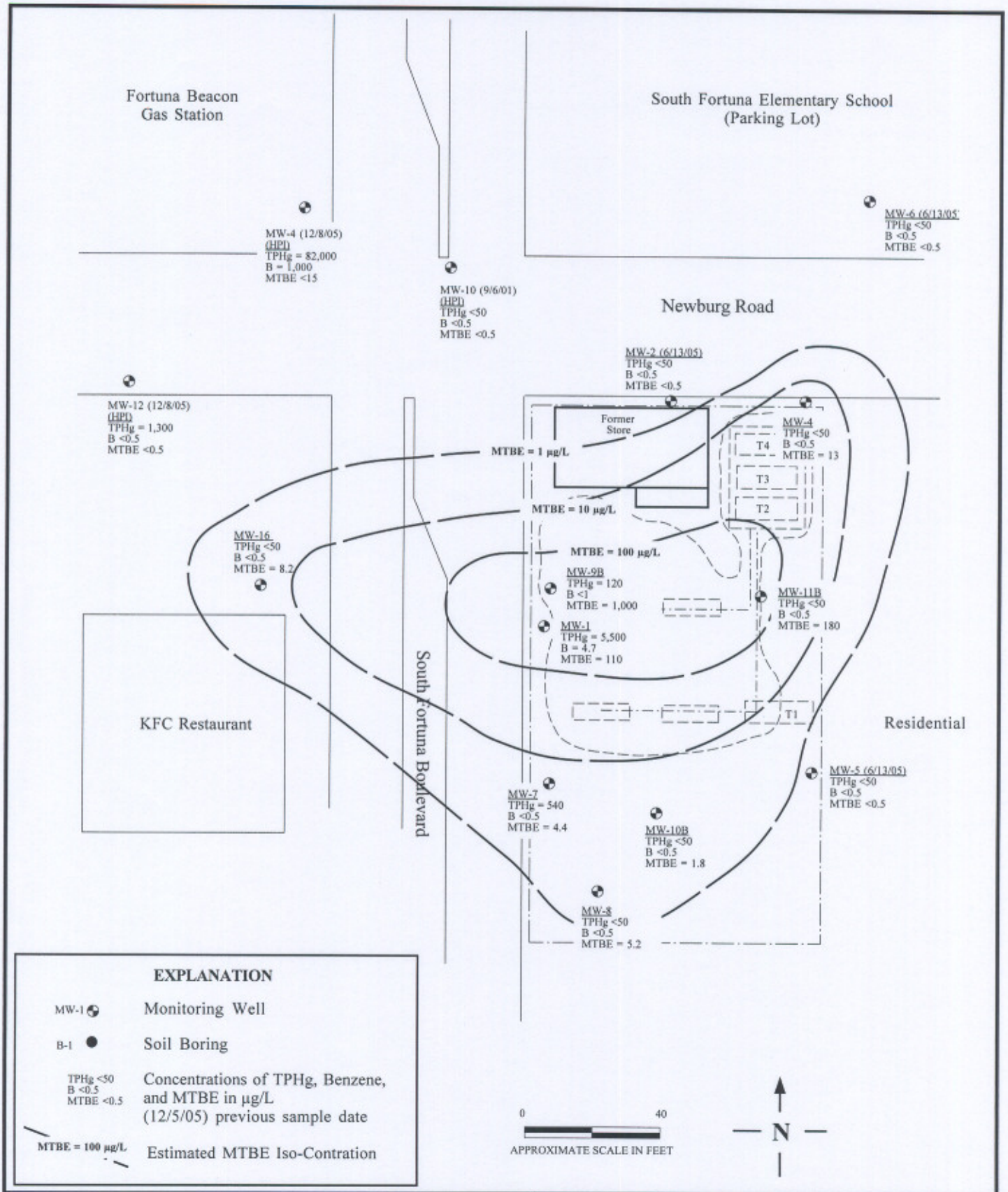
Project No.	Report Date	Figure
NC-004	1/06	3



Groundwater Contaminant Map - A-Zone
December 16, 2005
Former Cash Oil Fortuna
409 South Fortuna Boulevard
Fortuna, California

BLUE ROCK ENVIRONMENTAL, INC.

Project No.	Report Date	Figure
NC-004	1/06	4a



Groundwater Contaminant Map - B-Zone
December 16, 2005
Former Cash Oil Fortuna
409 South Fortuna Boulevard
Fortuna, California

BLUE ROCK ENVIRONMENTAL, INC.

Project No.	Report Date	Figure
NC-004	1/06	4b

GAGING DATA/PURGE CALCULATIONS

Job No.: NC-4 **Location:** 409 S. Fortuna Blvd. **Date:** 12/18/05 **Tech(s):** JL

WELL NO.	DIA. (in.)	DTB (ft.)	DTW (ft.)	ST (ft.)	CV (gal.)	PV (gal.)	SPH (ft.)	NOTES
MW-1	2"	19.72	13.26	6.46	1.03	3.09	0	D.O. = 2.04
MW-2	↓	14.79	11.06	3.73	0.59	1.77	0	D.O. = 4.67
MW-4	↓	19.75	11.13	8.62	1.37	4.11	0	D.O. = 0.68
MW-5	↓	19.30	10.38	8.92	1.42	4.26	0	D.O. = 2.47
MW-6	↓	18.80	11.64	7.16	1.14	3.42	0	D.O. = 6.45
MW-7	↓	19.90	3.72	16.18	2.58	7.74	0	D.O. = 0.58
MW-8	↓	18.25	12.90	5.35	0.85	2.55	0	D.O. = 0.61
MW-16	↓	19.52	12.07	7.45	1.19	3.57	0	D.O. = 0.90
MW-9B	↓	19.89	13.39	6.50	1.04	3.12	0	D.O. = ~~4.30~~ 1.1
MW-9A	↓	9.91	4.26	5.65	0.90	2.70	0	D.O. = 4.30
MW-10B	↓	19.32	10.91	8.41	1.34	4.02	0	D.O. = 5.64
MW-10A	↓	9.79	3.28	6.51	1.04	3.12	0	D.O. = ~~0.61~~ 2.04
MW-11B	↓	19.88	10.85	9.03	1.44	4.32	0	D.O. = 0.65
MW-11A	↓	9.92	Dry well not Sampled					

Explanation:

DIA. = Well Diameter
DTB = Depth to Bottom
DTW = Depth to Water
ST = Saturated Thickness (DTB-DTW)
CV = Casing Volume (ST x cf)
PV = Purge Volume (standard 3 x CV, well development 10 x CV)
SPH = Thickness of Separate Phase Hydrocarbons

Conversion Factors (cf):

2 in. dia. well cf = 0.16 gal./ft.
4 in. dia. well cf = 0.65 gal./ft.
6 in. dia. well cf = 1.44 gal./ft.

BLUE ROCK ENVIRONMENTAL, INC.

PURGING DATA

Job No.: NC-4 **Location:** 409 S. Fortuna Blvd **Date:** 12/16/05 **Tech:** JL

WELL No.	TIME	VOLUME (gal.)	COND. (mS/cm)	TEMP. (deg. F.)	pH
MW-1			---	---	---
Calc. purge	9:00	0.25	566	59.0	6.59
volume	9:05	1.75	584	61.3	6.50
3.09	9:10	3.10	556	61.6	6.53

Sample for: ~~TPHg~~ TPHd 8260 ~~BTEX~~ ~~MTBE~~ Metals

Purging Method: PVC bailer / Pump

COMMENTS: color, turbidity, recharge, sheen: clear / mod. / mod. / no sheen / odor

Sampling Method: Dedicated / Disposable bailer

Sample at: 9:15

WELL No.	TIME	VOLUME (gal.)	COND. (mS/cm)	TEMP. (deg. F.)	pH
MW-4			---	---	---
Calc. purge	9:20	0.25	407	59.9	6.41
volume	9:25	2.00	380	61.1	6.37
	9:30	4.10	397	61.4	6.40
4.11					

Sample for: ~~TPHg~~ TPHd 8260 ~~BTEX~~ ~~MTBE~~ Metals

Purging Method: PVC bailer / Pump

COMMENTS: color, turbidity, recharge, sheen: clear / mod / mod / no sheen / no odor

Sampling Method: Dedicated / Disposable bailer

Sample at: 9:35

WELL No.	TIME	VOLUME (gal.)	COND. (mS/cm)	TEMP. (deg. F.)	pH
MW-7			---	---	---
Calc. purge	9:40	0.25	300	57.2	6.37
volume	9:45	3.50	329	59.0	6.32
7.74	9:50	7.75	322	59.3	6.37

Sample for: ~~TPHg~~ TPHd 8260 ~~BTEX~~ ~~MTBE~~ Metals

Purging Method: PVC bailer / Pump

COMMENTS: color, turbidity, recharge, sheen: clear / mod. / good / no sheen / odor

Sampling Method: Dedicated / Disposable bailer

Sample at: 9:55

PURGING DATA

Job No.: NC-4 **Location:** 409 S. Fortuna Blvd. **Date:** 12/16/05 **Tech:** JL

WELL No.	TIME	VOLUME (gal.)	COND. (mS/cm)	TEMP. (deg. F.)	pH
MW-8			---	---	---
Calc. purge	10:00	0.25	239	58.6	6.25
volume	10:05	1.50	250	60.6	6.20
2.55	10:10	2.55	244	60.6	6.31

Sample for: ~~TPHg~~ TPHd 8260 ~~BTEX~~ ~~MTBE~~ Metals

Purging Method: PVC bailer / Pump

COMMENTS: color, turbidity, recharge, sheen: clear / mod. / mod. / no sheen / slight odor

Sampling Method: Dedicated / Disposable bailer

Sample at: 10:15

WELL No.	TIME	VOLUME (gal.)	COND. (mS/cm)	TEMP. (deg. F.)	pH
MW-9A			---	---	---
Calc. purge	10:20	0.25	682	56.4	6.90
volume	10:25	1.75	750	57.2	7.20
2.70	10:30	2.70	867	57.7	7.41

Sample for: ~~TPHg~~ TPHd 8260 ~~BTEX~~ ~~MTBE~~ Metals

Purging Method: PVC bailer / Pump

COMMENTS: color, turbidity, recharge, sheen: clear / mod. / good / no sheen / no odor

Sampling Method: Dedicated / Disposable bailer

Sample at: 10:35

WELL No.	TIME	VOLUME (gal.)	COND. (mS/cm)	TEMP. (deg. F.)	pH
MW-9B			---	---	---
Calc. purge	10:40	0.25	667	60.3	6.65
volume	10:45	1.75	672	62.2	6.37
3.12	10:50	3.10	737	62.3	6.42

Sample for: ~~TPHg~~ TPHd 8260 ~~BTEX~~ ~~MTBE~~ Metals

Purging Method: PVC bailer / Pump

COMMENTS: color, turbidity, recharge, sheen: clear / mod. / mod / no sheen / odor

Sampling Method: Dedicated / Disposable bailer

Sample at: 10:55

PURGING DATA

Job No.: NC-4 **Location:** 409 S. Fortuna Blvd. **Date:** 12/16/05 **Tech:** JL

WELL No.	TIME	VOLUME (gal.)	COND. (mS/cm)	TEMP. (deg. F.)	pH
MW-10A			---	---	---
Calc. purge	11:00	0.25	286	57.4	6.54
volume	11:05	1.50	300	58.7	6.40
3.12	11:10	3.10	273	59.5	6.38

COMMENTS: color, turbidity, recharge, sheen

clear / mod. / good / no sheen / no odor

Sample for: ~~TPHg~~ TPHd 8260 ~~BTEX~~ ~~MTBE~~ Metals

Purging Method: PVC bailer / Pump

Sampling Method: Dedicated / Disposable bailer

Sample at: 11:15

WELL No.	TIME	VOLUME (gal.)	COND. (mS/cm)	TEMP. (deg. F.)	pH
MW-10B			---	---	---
Calc. purge	11:20	0.25	364	62.1	6.58
volume	11:25	2.00	425	62.8	6.62
4.02	11:30	4.00	424	62.8	6.71

COMMENTS: color, turbidity, recharge, sheen

clear / mod. / mod. / no sheen / no odor

Sample for: ~~TPHg~~ TPHd 8260 ~~BTEX~~ ~~MTBE~~ Metals

Purging Method: PVC bailer / Pump

Sampling Method: Dedicated / Disposable bailer

Sample at: 11:36

WELL No.	TIME	VOLUME (gal.)	COND. (mS/cm)	TEMP. (deg. F.)	pH
MW-11A			---	---	---
Calc. purge					
volume		well	dry	no	
		sample	taken		

COMMENTS: color, turbidity, recharge, sheen

Sample for: ~~TPHg~~ TPHd 8260 ~~BTEX~~ ~~MTBE~~ Metals

Purging Method: PVC bailer / Pump

Sampling Method: Dedicated / Disposable bailer

Sample at:

PURGING DATA

Job No.: NC-4 **Location:** 409 S. Fortuna Blvd. **Date:** 12/16/05 **Tech:** JL

WELL No.	TIME	VOLUME (gal.)	COND. (mS/cm)	TEMP. (deg. F.)	pH
MW-11B			---	---	---
Calc. purge	11:40	0.25	255	61.0	6.72
volume	11:45	2.25	274	62.4	6.35
4.32	11:50	4.35	266	62.7	6.28

COMMENTS: color, turbidity, recharge, sheen

clear / mod. / mod. / no sheen / odor

Sample for: ~~TPHg~~ TPHd 8260 ~~BTEX~~ ~~MTBE~~ Metals

Purging Method: PVC bailer / Pump

Sampling Method: Dedicated / Disposable bailer

Sample at: 11:55

WELL No.	TIME	VOLUME (gal.)	COND. (mS/cm)	TEMP. (deg. F.)	pH
MW-16			---	---	---
Calc. purge	12:00	0.25	231	61.1	6.02
volume	12:05	1.75	221	62.7	6.06
3.57	12:10	3.55	211	63.1	6.26

COMMENTS: color, turbidity, recharge, sheen

clear / mod. / good / no sheen / no odor

Sample for: ~~TPHg~~ TPHd 8260 ~~BTEX~~ ~~MTBE~~ Metals

Purging Method: PVC bailer / Pump

Sampling Method: Dedicated / Disposable bailer

Sample at: 12:15

WELL No.	TIME	VOLUME (gal.)	COND. (mS/cm)	TEMP. (deg. F.)	pH
			---	---	---
Calc. purge					
volume					

COMMENTS: color, turbidity, recharge, sheen

Sample for: ~~TPHg~~ TPHd 8260 ~~BTEX~~ ~~MTBE~~ Metals

Purging Method: PVC bailer / Pump

Sampling Method: Dedicated / Disposable bailer

Sample at:

KIFF Analytical LLC

Report Number : 47524
Date : 12/23/2005

Scott Ferriman
Blue Rock Environmental, Inc.
535 3rd Street, Suite 100
Eureka, CA 95501

Subject : 10 Water Samples
Project Name : Former Cash Oil Fortuna
Project Number : NC-4

Dear Mr. Ferriman,

Chemical analysis of the samples referenced above has been completed. Summaries of the data are contained on the following pages. Sample(s) were received under documented chain-of-custody. US EPA protocols for sample storage and preservation were followed.

Kiff Analytical is certified by the State of California (# 2236). If you have any questions regarding procedures or results, please call me at 530-297-4800.

Sincerely,

Jeff Dahl

KIFF Analytical LLC

Report Number : 47524
Date : 12/23/2005

Subject : 10 Water Samples
Project Name : Former Cash Oil Fortuna
Project Number : NC-4

Case Narrative

Matrix Spike/Matrix Spike Duplicate Results associated with samples MW-4, MW-7, MW-8, and MW-9A for the analyte Methyl-t-butyl ether were affected by the analyte concentrations already present in the un-spiked sample.

Approved By: Jeff Dahl

2795 2nd St, Suite 300 Davis, CA 95616 530-297-4800

KIFF Analytical LLC

Report Number : 47524

Date : 12/23/2005

Project Name : **Former Cash Oil Fortuna**

Project Number : **NC-4**

Sample : **MW-1** Matrix : Water Lab Number : 47524-01

Sample Date :12/16/2005

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**4.7**	0.50	ug/L	EPA 8260B	12/21/2005
Toluene	**1.3**	0.50	ug/L	EPA 8260B	12/21/2005
Ethylbenzene	**18**	0.50	ug/L	EPA 8260B	12/21/2005
Total Xylenes	**2.0**	0.50	ug/L	EPA 8260B	12/21/2005
Methyl-t-butyl ether (MTBE)	**110**	0.50	ug/L	EPA 8260B	12/21/2005
TPH as Gasoline	**5500**	90	ug/L	EPA 8260B	12/22/2005
Toluene - d8 (Surr)	87.4		% Recovery	EPA 8260B	12/21/2005
4-Bromofluorobenzene (Surr)	89.2		% Recovery	EPA 8260B	12/21/2005

Sample : **MW-4** Matrix : Water Lab Number : 47524-02

Sample Date :12/16/2005

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**< 0.50**	0.50	ug/L	EPA 8260B	12/22/2005
Toluene	**< 0.50**	0.50	ug/L	EPA 8260B	12/22/2005
Ethylbenzene	**< 0.50**	0.50	ug/L	EPA 8260B	12/22/2005
Total Xylenes	**< 0.50**	0.50	ug/L	EPA 8260B	12/22/2005
Methyl-t-butyl ether (MTBE)	**13**	0.50	ug/L	EPA 8260B	12/22/2005
TPH as Gasoline	**< 50**	50	ug/L	EPA 8260B	12/22/2005
Toluene - d8 (Surr)	96.9		% Recovery	EPA 8260B	12/22/2005
4-Bromofluorobenzene (Surr)	98.4		% Recovery	EPA 8260B	12/22/2005

Approved By: Jeff Dahl

2795 2nd St., Suite 300 Davis, CA 95616 530-297-4800

KIFF Analytical LLC

Report Number : 47524
Date : 12/23/2005

Project Name : **Former Cash Oil Fortuna**
Project Number : **NC-4**

Sample : **MW-7** Matrix : Water Lab Number : 47524-03
Sample Date :12/16/2005

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**< 0.50**	0.50	ug/L	EPA 8260B	12/22/2005
Toluene	**< 0.50**	0.50	ug/L	EPA 8260B	12/22/2005
Ethylbenzene	**< 0.50**	0.50	ug/L	EPA 8260B	12/22/2005
Total Xylenes	**< 0.50**	0.50	ug/L	EPA 8260B	12/22/2005
Methyl-t-butyl ether (MTBE)	**4.4**	0.50	ug/L	EPA 8260B	12/22/2005
TPH as Gasoline	**540**	50	ug/L	EPA 8260B	12/22/2005
Toluene - d8 (Surr)	96.8		% Recovery	EPA 8260B	12/22/2005
4-Bromofluorobenzene (Surr)	98.5		% Recovery	EPA 8260B	12/22/2005

Sample : **MW-8** Matrix : Water Lab Number : 47524-04
Sample Date :12/16/2005

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**< 0.50**	0.50	ug/L	EPA 8260B	12/22/2005
Toluene	**< 0.50**	0.50	ug/L	EPA 8260B	12/22/2005
Ethylbenzene	**< 0.50**	0.50	ug/L	EPA 8260B	12/22/2005
Total Xylenes	**< 0.50**	0.50	ug/L	EPA 8260B	12/22/2005
Methyl-t-butyl ether (MTBE)	**5.2**	0.50	ug/L	EPA 8260B	12/22/2005
TPH as Gasoline	**< 50**	50	ug/L	EPA 8260B	12/22/2005
Toluene - d8 (Surr)	96.6		% Recovery	EPA 8260B	12/22/2005
4-Bromofluorobenzene (Surr)	97.7		% Recovery	EPA 8260B	12/22/2005

Approved By: Jeff Dahl

2795 2nd St., Suite 300 Davis, CA 95616 530-297-4800

KIFF Analytical LLC

Report Number : 47524

Date : 12/23/2005

Project Name : **Former Cash Oil Fortuna**

Project Number : **NC-4**

Sample : **MW-9A** Matrix : Water Lab Number : 47524-05

Sample Date :12/16/2005

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**< 0.50**	0.50	ug/L	EPA 8260B	12/22/2005
Toluene	**< 0.50**	0.50	ug/L	EPA 8260B	12/22/2005
Ethylbenzene	**< 0.50**	0.50	ug/L	EPA 8260B	12/22/2005
Total Xylenes	**< 0.50**	0.50	ug/L	EPA 8260B	12/22/2005
Methyl-t-butyl ether (MTBE)	**2.0**	0.50	ug/L	EPA 8260B	12/22/2005
TPH as Gasoline	**< 50**	50	ug/L	EPA 8260B	12/22/2005
Toluene - d8 (Surr)	96.9		% Recovery	EPA 8260B	12/22/2005
4-Bromofluorobenzene (Surr)	98.0		% Recovery	EPA 8260B	12/22/2005

Sample : **MW-9B** Matrix : Water Lab Number : 47524-06

Sample Date :12/16/2005

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**< 1.0**	1.0	ug/L	EPA 8260B	12/22/2005
Toluene	**< 1.0**	1.0	ug/L	EPA 8260B	12/22/2005
Ethylbenzene	**< 1.0**	1.0	ug/L	EPA 8260B	12/22/2005
Total Xylenes	**< 1.0**	1.0	ug/L	EPA 8260B	12/22/2005
Methyl-t-butyl ether (MTBE)	**1000**	2.0	ug/L	EPA 8260B	12/23/2005
TPH as Gasoline	**120**	100	ug/L	EPA 8260B	12/22/2005
Toluene - d8 (Surr)	95.9		% Recovery	EPA 8260B	12/22/2005
4-Bromofluorobenzene (Surr)	98.0		% Recovery	EPA 8260B	12/22/2005

Approved By: Jeff Dahl

2795 2nd St., Suite 300 Davis, CA 95616 530-297-4800

KIFF Analytical LLC

Report Number : 47524

Date : 12/23/2005

Project Name : **Former Cash Oil Fortuna**

Project Number : **NC-4**

Sample : **MW-10A** Matrix : Water Lab Number : 47524-07

Sample Date :12/16/2005

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**< 0.50**	0.50	ug/L	EPA 8260B	12/21/2005
Toluene	**< 0.50**	0.50	ug/L	EPA 8260B	12/21/2005
Ethylbenzene	**< 0.50**	0.50	ug/L	EPA 8260B	12/21/2005
Total Xylenes	**< 0.50**	0.50	ug/L	EPA 8260B	12/21/2005
Methyl-t-butyl ether (MTBE)	**< 0.50**	0.50	ug/L	EPA 8260B	12/21/2005
TPH as Gasoline	**< 50**	50	ug/L	EPA 8260B	12/21/2005
Toluene - d8 (Surr)	100		% Recovery	EPA 8260B	12/21/2005
4-Bromofluorobenzene (Surr)	90.6		% Recovery	EPA 8260B	12/21/2005

Sample : **MW-10B** Matrix : Water Lab Number : 47524-08

Sample Date :12/16/2005

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**< 0.50**	0.50	ug/L	EPA 8260B	12/21/2005
Toluene	**< 0.50**	0.50	ug/L	EPA 8260B	12/21/2005
Ethylbenzene	**< 0.50**	0.50	ug/L	EPA 8260B	12/21/2005
Total Xylenes	**< 0.50**	0.50	ug/L	EPA 8260B	12/21/2005
Methyl-t-butyl ether (MTBE)	**1.8**	0.50	ug/L	EPA 8260B	12/21/2005
TPH as Gasoline	**< 50**	50	ug/L	EPA 8260B	12/21/2005
Toluene - d8 (Surr)	99.9		% Recovery	EPA 8260B	12/21/2005
4-Bromofluorobenzene (Surr)	89.6		% Recovery	EPA 8260B	12/21/2005

Approved By: Jeff Dahl

2795 2nd St., Suite 300 Davis, CA 95616 530-297-4800

KIFF Analytical LLC

Report Number : 47524

Date : 12/23/2005

Project Name : **Former Cash Oil Fortuna**

Project Number : **NC-4**

Sample : **MW-11B** Matrix : Water Lab Number : 47524-09

Sample Date :12/16/2005

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**< 0.50**	0.50	ug/L	EPA 8260B	12/21/2005
Toluene	**< 0.50**	0.50	ug/L	EPA 8260B	12/21/2005
Ethylbenzene	**< 0.50**	0.50	ug/L	EPA 8260B	12/21/2005
Total Xylenes	**< 0.50**	0.50	ug/L	EPA 8260B	12/21/2005
Methyl-t-butyl ether (MTBE)	**180**	0.50	ug/L	EPA 8260B	12/21/2005
TPH as Gasoline	**< 50**	50	ug/L	EPA 8260B	12/21/2005
Toluene - d8 (Surr)	98.9		% Recovery	EPA 8260B	12/21/2005
4-Bromofluorobenzene (Surr)	89.8		% Recovery	EPA 8260B	12/21/2005

Sample : **MW-16** Matrix : Water Lab Number : 47524-10

Sample Date :12/16/2005

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**< 0.50**	0.50	ug/L	EPA 8260B	12/22/2005
Toluene	**< 0.50**	0.50	ug/L	EPA 8260B	12/22/2005
Ethylbenzene	**< 0.50**	0.50	ug/L	EPA 8260B	12/22/2005
Total Xylenes	**< 0.50**	0.50	ug/L	EPA 8260B	12/22/2005
Methyl-t-butyl ether (MTBE)	**8.2**	0.50	ug/L	EPA 8260B	12/22/2005
TPH as Gasoline	**< 50**	50	ug/L	EPA 8260B	12/22/2005
Toluene - d8 (Surr)	97.0		% Recovery	EPA 8260B	12/22/2005
4-Bromofluorobenzene (Surr)	85.0		% Recovery	EPA 8260B	12/22/2005

Approved By: Jeff Dahl

2795 2nd St., Suite 300 Davis, CA 95616 530-297-4800

Report Number : 47524

Date : 12/23/2005

QC Report : Method Blank Data

Project Name : **Former Cash Oil Fortuna**

Project Number : **NC-4**

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	12/23/2005
Benzene	< 0.50	0.50	ug/L	EPA 8260B	12/21/2005
Toluene	< 0.50	0.50	ug/L	EPA 8260B	12/21/2005
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	12/21/2005
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	12/21/2005
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	12/21/2005
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	12/21/2005
Toluene - d8 (Surr)	96.8		%	EPA 8260B	12/21/2005
4-Bromofluorobenzene (Surr)	98.6		%	EPA 8260B	12/21/2005
Benzene	< 0.50	0.50	ug/L	EPA 8260B	12/21/2005
Toluene	< 0.50	0.50	ug/L	EPA 8260B	12/21/2005
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	12/21/2005
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	12/21/2005
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	12/21/2005
Toluene - d8 (Surr)	98.3		%	EPA 8260B	12/21/2005
4-Bromofluorobenzene (Surr)	87.6		%	EPA 8260B	12/21/2005
Benzene	< 0.50	0.50	ug/L	EPA 8260B	12/21/2005
Toluene	< 0.50	0.50	ug/L	EPA 8260B	12/21/2005
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	12/21/2005
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	12/21/2005
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	12/21/2005
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	12/21/2005
Toluene - d8 (Surr)	99.0		%	EPA 8260B	12/21/2005
4-Bromofluorobenzene (Surr)	85.0		%	EPA 8260B	12/21/2005

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	12/21/2005
Toluene	< 0.50	0.50	ug/L	EPA 8260B	12/21/2005
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	12/21/2005
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	12/21/2005
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	12/21/2005
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	12/21/2005
Toluene - d8 (Surr)	101		%	EPA 8260B	12/21/2005
4-Bromofluorobenzene (Surr)	91.9		%	EPA 8260B	12/21/2005

Approved By: Jeff Dahl

KIFF ANALYTICAL, LLC

2795 2nd St, Suite 300 Davis, CA 95616 530-297-4800

Report Number : 47524

QC Report : Matrix Spike/ Matrix Spike Duplicate

Date : 12/23/2005

Project Name : **Former Cash Oil Fortuna**

Project Number : **NC-4**

Parameter	Spiked Sample	Sample Value	Spike Level	Spike Dup. Level	Spiked Sample Value	Duplicate Spiked Sample Value	Units	Analysis Method	Date Analyzed	Spiked Sample Percent Recov.	Duplicate Spiked Sample Percent Recov.	Relative Percent Diff.	Spiked Sample Percent Recov. Limit	Relative Percent Diff. Limit
Benzene	47525-09	<0.50	39.8	39.3	37.9	36.8	ug/L	EPA 8260B	12/23/05	95.4	93.6	1.91	70-130	25
Toluene	47525-09	<0.50	39.8	39.3	35.8	34.4	ug/L	EPA 8260B	12/23/05	90.0	87.7	2.59	70-130	25
Tert-Butanol	47525-09	<5.0	199	196	192	190	ug/L	EPA 8260B	12/23/05	96.5	96.9	0.408	70-130	25
Methyl-t-Butyl Ether	47525-09	2.0	39.8	39.3	36.7	37.0	ug/L	EPA 8260B	12/23/05	87.2	89.0	2.12	70-130	25
Benzene	47486-02	5.8	40.0	40.0	46.6	45.1	ug/L	EPA 8260B	12/21/05	102	98.2	3.88	70-130	25
Toluene	47486-02	<0.50	40.0	40.0	40.2	39.1	ug/L	EPA 8260B	12/21/05	100	97.7	2.81	70-130	25
Tert-Butanol	47486-02	8.5	200	200	212	212	ug/L	EPA 8260B	12/21/05	102	102	0.286	70-130	25
Methyl-t-Butyl Ether	47486-02	310	40.0	40.0	335	333	ug/L	EPA 8260B	12/21/05	62.8	57.6	8.47	70-130	25
Benzene	47512-01	<0.50	40.0	40.0	41.3	39.8	ug/L	EPA 8260B	12/21/05	103	99.6	3.57	70-130	25
Toluene	47512-01	0.64	40.0	40.0	39.9	38.2	ug/L	EPA 8260B	12/21/05	98.2	93.8	4.47	70-130	25
Tert-Butanol	47512-01	5200	200	200	5470	5480	ug/L	EPA 8260B	12/21/05	140	144	2.94	70-130	25
Methyl-t-Butyl Ether	47512-01	17	40.0	40.0	57.7	56.6	ug/L	EPA 8260B	12/21/05	103	99.9	2.76	70-130	25
Benzene	47511-03	<0.50	40.0	40.0	40.4	38.9	ug/L	EPA 8260B	12/21/05	101	97.3	3.69	70-130	25
Toluene	47511-03	<0.50	40.0	40.0	39.0	37.1	ug/L	EPA 8260B	12/21/05	97.5	92.8	4.90	70-130	25
Tert-Butanol	47511-03	<5.0	200	200	191	187	ug/L	EPA 8260B	12/21/05	95.6	93.7	2.06	70-130	25
Methyl-t-Butyl Ether	47511-03	<0.50	40.0	40.0	37.0	36.9	ug/L	EPA 8260B	12/21/05	92.4	92.2	0.198	70-130	25
Benzene	47518-07	<0.50	40.0	40.0	43.8	43.2	ug/L	EPA 8260B	12/21/05	109	108	1.30	70-130	25
Toluene	47518-07	<0.50	40.0	40.0	42.8	42.4	ug/L	EPA 8260B	12/21/05	107	106	1.02	70-130	25

Approved By: Jeff Dahl

KIFF ANALYTICAL, LLC

2795 2nd St, Suite 300 Davis, CA 95616 530-297-4800

Report Number : 47524

QC Report : Matrix Spike/ Matrix Spike Duplicate

Date : 12/23/2005

Project Name : **Former Cash Oil Fortuna**

Project Number : **NC-4**

Parameter	Spiked Sample	Sample Value	Spike Level	Spike Dup. Level	Spiked Sample Value	Duplicate Spiked Sample Value	Units	Analysis Method	Date Analyzed	Spiked Sample Percent Recov.	Duplicate Spiked Sample Percent Recov.	Relative Percent Diff.	Spiked Sample Percent Recov. Limit	Relative Percent Diff. Limit
Tert-Butanol	47518-07	<5.0	200	200	213	224	ug/L	EPA 8260B	12/21/05	106	112	5.37	70-130	25
Methyl-t-Butyl Ether	47518-07	<0.50	40.0	40.0	41.7	41.5	ug/L	EPA 8260B	12/21/05	104	104	0.521	70-130	25

Approved By: Jeff Dahl

KIFF ANALYTICAL, LLC

2795 2nd St, Suite 300 Davis, CA 95616 530-297-4800

Report Number : 47524

QC Report : Laboratory Control Sample (LCS)

Date : 12/23/2005

Project Name : **Former Cash Oil Fortuna**

Project Number : **NC-4**

Parameter	Spike Level	Units	Analysis Method	Date Analyzed	LCS Percent Recov.	LCS Percent Recov. Limit
Benzene	40.0	ug/L	EPA 8260B	12/23/05	96.4	70-130
Toluene	40.0	ug/L	EPA 8260B	12/23/05	90.8	70-130
Tert-Butanol	200	ug/L	EPA 8260B	12/23/05	99.6	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	12/23/05	94.3	70-130
Benzene	40.0	ug/L	EPA 8260B	12/21/05	97.9	70-130
Toluene	40.0	ug/L	EPA 8260B	12/21/05	97.8	70-130
Tert-Butanol	200	ug/L	EPA 8260B	12/21/05	99.9	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	12/21/05	94.3	70-130
Benzene	40.0	ug/L	EPA 8260B	12/21/05	97.7	70-130
Toluene	40.0	ug/L	EPA 8260B	12/21/05	92.4	70-130
Tert-Butanol	200	ug/L	EPA 8260B	12/21/05	90.5	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	12/21/05	102	70-130
Benzene	40.0	ug/L	EPA 8260B	12/21/05	98.0	70-130
Toluene	40.0	ug/L	EPA 8260B	12/21/05	91.4	70-130
Tert-Butanol	200	ug/L	EPA 8260B	12/21/05	90.8	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	12/21/05	99.5	70-130
Benzene	40.0	ug/L	EPA 8260B	12/21/05	109	70-130

Approved By: Jeff Dahl

KIFF ANALYTICAL, LLC

2795 2nd St, Suite 300 Davis, CA 95616 530-297-4800

Report Number : 47524

QC Report : Laboratory Control Sample (LCS)

Date : 12/23/2005

Project Name : **Former Cash Oil Fortuna**

Project Number : **NC-4**

Parameter	Spike Level	Units	Analysis Method	Date Analyzed	LCS Percent Recov.	LCS Percent Recov. Limit
Toluene	40.0	ug/L	EPA 8260B	12/21/05	108	70-130
Tert-Butanol	200	ug/L	EPA 8260B	12/21/05	107	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	12/21/05	107	70-130

Approved By: Jeff Dahl

KIFF ANALYTICAL, LLC

2795 2nd St, Suite 300 Davis, CA 95616 530-297-4800

KIFF Analytical LLC

2795 2nd Street, Suite 300
Davis, CA 95616
Lab: 530.297.4800
Fax: 530.297.4802

SRG # / Lab No. 47524

Page 1 of 2

Chain-of-Custody Record and Analysis Request

Project Contact (Hardcopy or PDF To): Scott Ferriman

California EDF Report? ☒ Yes ☐ No

Company / Address: Blue Rock Env. Inc. 535 3rd st. Ste. 100 Eureka CA

Sampling Company Log Code:

Phone #: (707) 441-1934 Fax #: (707) 441-1949

Global ID: T0602300452

Project #: NC-4 P.O. #:

EDF Deliverable To (Email Address): scott@bluerockenv.com

Project Name: Former Cash Oil Fortuna

Sampler Signature: Dana Lindeman

Project Address: 409 S. Fortuna Blvd. Fortuna, CA

Sample Designation	Sampling Date	Sampling Time	Container: 40 ml VOA	Sleeve	Poly	Glass	Tedlar	Preservative: HCl	HNO_3	None	Matrix: Water	Soil	Air	MTBE (EPA 8260B) per EPA 8021 level @ 5.0 ppb	MTBE (EPA 8260B) @ 0.5 ppb	BTEX (EPA 8260B)	TPH Gas (EPA 8260B)	5 Oxygenates (EPA 8260B)	7 Oxygenates (EPA 8260B)	Lead Scav.(1,2 DCA & 1,2 EDB-EPA 8260B)	Volatile Halocarbons (EPA 8260B)	Volatile Organics Full List (EPA 8260B)	Volatile Organics (EPA 524.2 Drinking Water)	TPH as Diesel (EPA 8015M)	TPH as Motor Oil (EPA 8015M)	Total Lead (EPA 6010)	W.E.T. Lead (STLC)				TAT: 12 hr / 24 hr / 48 hr / 72 hr / 1 wk	For Lab Use Only
MW-1	12/16/05	9:15	3					X			X				X	X	X														X	-01
MW-4		9:35																														-02
MW-7		9:55																														-03
MW-8		10:15																														-04
MW-9A		10:35																														-05
MW-9B		10:55																														-06
MW-10A		11:15																														-07
MW-10B		11:35																														-08
~~[illegible]~~																																
MW-11B	12/16/05	11:55																														-09

Relinquished by:	Date	Time	Received by:
Dana Lindeman	12/16/05		Fed Ex

Remarks:

Sample Receipt
Temp °C 5.4 Therm. ID# 1R1
Initial PJN Date 121705
Time 1345 Coolant present Y / N

Bill to:

Relinquished by:	Date	Time	Received by Laboratory:
	PJN ~~121665~~ 121765	1345	Peter Nguyen Kiff Analytical

For Lab Use Only: Sample Receipt

Temp °C	Initials	Date	Time	Therm. ID #	Coolant Present
					Yes / No

Distribution: White - Lab; Pink - Originator
Rev: 051805

KIFF Analytical LLC

2795 2nd Street, Suite 300
Davis, CA 95616
Lab: 530.297.4800
Fax: 530.297.4802

SRG # / Lab No. 47524

Page 2 of 2

Chain-of-Custody Record and Analysis Request

Project Contact (Hardcopy or PDF To): Scott Ferriman

California EDF Report? ☒ Yes ☐ No

Company / Address: Blue Rock Env. Inc. 535 3rd St. Ste. 100 Eureka CA

Sampling Company Log Code:

Phone #: (707)441-1934 Fax #: (707)441-1949

Global ID: T0602300452

Project #: NC-4 P.O. #:

EDF Deliverable To (Email Address): scott@bluerockenv.com

Project Name: Former Cash Oil Fortuna

Sampler Signature: James Linderman

Project Address: 409 S. Fortuna Blvd. Fortuna, CA

Analysis Request

Sample Designation	Sampling Date	Sampling Time	Container: 40 ml VOA	Container: Sleeve	Container: Poly	Container: Glass	Container: Tedlar	Preservative: HCl	Preservative: HNO_3	Preservative: None	Matrix: Water	Matrix: Soil	Matrix: Air	MTBE (EPA 8260B) per EPA 8021 level @ 5.0 ppb	MTBE (EPA 8260B) @ 0.5 ppb	BTEX (EPA 8260B)	TPH Gas (EPA 8260B)	5 Oxygenates (EPA 8260B)	7 Oxygenates (EPA 8260B)	Lead Scav.(1,2 DCA & 1,2 EDB-EPA 8260B)	Volatile Halocarbons (EPA 8260B)	Volatile Organics Full List (EPA 8260B)	Volatile Organics (EPA 524.2 Drinking Water)	TPH as Diesel (EPA 8015M)	TPH as Motor Oil (EPA 8015M)	Total Lead (EPA 6010)	W.E.T. Lead (STLC)	TAT ☐ 12 hr ☐ 24 hr ☐ 48 hr ☐ 72 hr ☒ 1 wk	For Lab Use Only
MW-16	12/16/05	12:15	3					X			X				X	X	X											X	-10

Relinquished by:	Date	Time	Received by:
James Linderman	12/16/05		Fed Ex
	PJN ~~1345~~ 121709	1345	Received by Laboratory: Peter Nguyen Kiff Analytical

Remarks:

Bill to:

For Lab Use Only: Sample Receipt

Temp °C	Initials	Date	Time	Therm. ID #	Coolant Present
					Yes / No

Distribution: White - Lab; Pink - Originator
Rev: 051805